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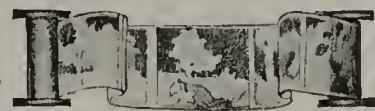
JULY, 1906

No. 7

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The Photographic Times



An Independent Illustrated Monthly Magazine Devoted to
The Interests of Pictorial and Scientific Photography.
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39 UNION SQUARE. NEW YORK CITY

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39 Union Square, New York City

THE PHOTOGRAPHIC TIMES

Volume XXXVIII.

JULY, 1906.

Number 7.

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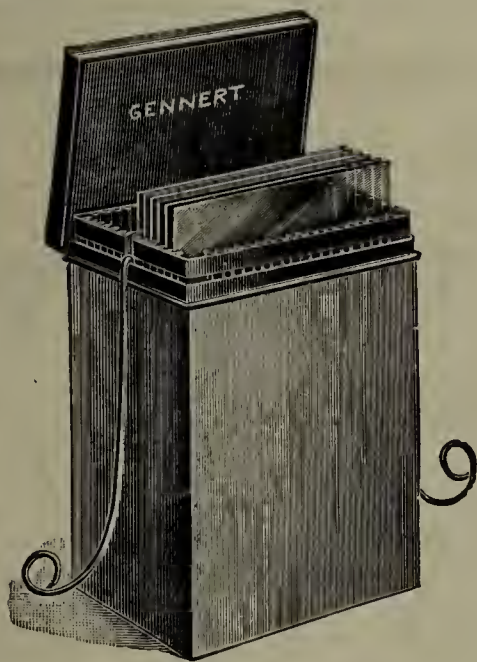


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ALONG THE MYSTIC

By Malcolm Dean Miller

THE PHOTOGRAPHIC TIMES

VOL. XXXVIII.

JULY, 1906.

No. 7.

CHARACTER LIGHTING AND POSING—DIFFUSION OR CONCENTRATION

BY FELIX RAYMER

IT is not unusual for one to see pictures that would be of the very first order if it were not for the fact that the operator used poor judgment in the distribution of his light over the face. It is a well-known fact among the best workmen that the expression is controlled in no small degree by the arrangement of the shades on the light, and the strength of the light as it falls on the face. The expression of a face is nothing more or less than the lines showing in the faces of some subjects differently from others. We look at one face and say the expression is good, or bad. We mean by this that the expression is either pleasant or otherwise. The cause for these differing expressions is that certain faculties in the face and head have been used by one person, while others have been used by the other person. The one having a pleasant expression has brought into play faculties that form different lines from those brought into play by the person having a sour expression. These lines will be shown in each face more or less regardless of what the operator does, but there are times when he may soften them and make a better expression. It will not be possible to take them out entirely, and neither would it be the part of wisdom to do so. If they are taken out we destroy the likeness, but we may soften them and it proves an advantage.

Before going into the matter of diffusion and concentration, I would like to have it understood that I make either the soft diffused or strong concentrated effects the same so far as the direction the light takes in falling toward the subject is concerned. In fact all effects of light should be made the same up to the point where we decide there should be a softer effect made. If this is done, all that is left to do will be to place a white screen over the head. It has been my observation that many operators do not know what shade or color curtains or screens to use, to secure the different effects. I have found on most lights two sets of curtains, one that had at one time been white, but is now a dirty yellow or some other tone that is not desirable, and the other set, of some darker tone, say a blue, drab, or similar nature. Now, I have found that the simpler we can curtain the light the better off we will be and the easier we can get what we want. It is all right to have the two sets of curtains, but first understand what each set is to do. One set will do one thing while the other is for a different purpose altogether. We know that we want diffusion or softness at times. Now the natural question would be what shades or curtains will produce this softness. There can be one answer to that question, and that is "a curtain that will soften the light, but not close it out of the room." There can be but

one curtain that would do this and that would be *white*. Now, do not think because the curtain was white when it was first placed on the light, that it will do forever and eternally. It will not, for it catches dust, and if the light leaks, which is more than probable, it will have dust streaks all through it and after a time it becomes a dirty yellow or brown. When this stage is reached it closes out more or less of the light, which is quite a different matter from diffusing it, or making the effect softer. The more color there is to the shades or curtains, the more of a concentrated effect will result where the shades are used. For diffusion the light should not be made smaller, nor any part of it closed out, but all of the light should pass through white screens, or sifted through. The effect of this can be seen by looking into the dark corners of a room, while the light comes through a window, which has not been covered with a screen. Then take a white screen, and place over the window, and see the dark corners become higher illuminated, with greater detail in them. Now, comes the question "but if the light is screened in this way will it not make the exposure longer."

No, but the reverse. It makes it necessary to give somewhat less time than where the stronger light is used. Remember we are to time for the shadows. When the light is open, the dark corners, (or shadows) are so deep, that there is but little or no detail in them. But when the white screen is placed over the window the shadows become more luminous, and full of detail. When this is done the time which is still for the shadows may be less, for it is for detail that we expose, and if the shadows are lighter we require less time to get the detail. So much for diffusing curtains. Now for the concentrating curtains. We all understand to concentrate means to

close up, to make smaller, to eliminate certain things and accentuate others. How is this to be done. There can be but one way to concentrate the light on any part of the face and that is to make the light small enough to allow of its falling on that part of the face, and no where else. Now how is this to be done? Why by making the light smaller and moving the subject up closer to it so that the light will not spread all over the subject. There can be but one way to make the light smaller and that is to close off part of it. This can be done only by having curtains that are absolutely opaque so that no light can come through them. When such curtains are drawn over any part of the light, that part of the light is closed out of the room, and of course the remaining part is smaller and being smaller it will concentrate at some particular part of the face. There is the success of concentration. Now if the operator understands the uses of these two classes of curtains he will have no trouble in securing the effects he is after. I have found many operators who think they are closing off the light when they draw a white curtain over the light, while others think they are making the effect of light softer by drawing an opaque curtain over the light. These are both wrong. If the soft effect is wanted use the curtain that will make the light soft—white. If a concentrated effect is wanted use a curtain that will concentrate the light, which is of course an opaque curtain. I use very dark green on my light for the opaque curtains, and find them very satisfactory.

In making up the lighting for each face, as has been stated in these articles previously, there should be a close study made of all faculties which go toward making up the character of that face. If it is found that the face has a very decided marking of character, it will likely be to the advantage of the sub-

ject to have this character modified or softened, if so here is where the white curtains come into play. But on the other hand if the character is found rather insipid, and weak, it will likely be to the advantage of the subject to concentrate the light more and accentuate the character that is shown, still stronger. I will suggest my plan of procedure, and those wishing to try it are welcome. First I have the subject seat himself under the light, at what ever point the posing chair happens to be. It is of course at different stations in the room, owing to the fact, that on one subject I had to concentrate the light more and in doing so had to place the subject nearer to it, while in another case I wanted a softer effect, and placed the subject farther from the light opening all of the opaque curtain and softening the effect with the diffusing curtains. Therefore I say seat the subject at whatever point the chair happens to be. Next, arrange the light so that it falls on the face from an angle of about 45 degrees. To do this quickly, all that is necessary, is to notice the shadow from the nose, and when it falls away from the nose toward the corner of the mouth, the light will be about right. Next have the subject turn toward the light until there appears in the shadow eye a small dart of light, known as the catch light. When this point is reached, have the subject rest for a moment or so, while you study the

lighting. If the lines appear abnormally deep, it is because you are using too concentrated effect of light. Move the subject farther from it, and arrange it again, so that it falls on the face from an angle of 45 degrees. And I will say here that the direction the light falls is controlled entirely by the arrangement of the *opaque* curtains. The white curtains are to soften the light remember. After the opaque curtains have been drawn so that the shadow from the nose falls toward the corner of the light, and the catch has been secured, notice the lines of the face again. If they are still too strong, move him farther from the light and proceed as before, but if they appear about what is natural, next look at the deepest shadows and likely they will be too deep for the highest lights. If so, draw over the white curtains until they come together in better harmony.

If when the subject is first seated the light seems too soft or flat, move the subject nearer the light, and concentrate it more, or in other words, make the light smaller. This will have to be done in either case if the right direction of light is secured (45 degrees.) But there will be little trouble if the nature of the two sets of curtains is understood. The opaque for concentrating, and controlling the direction the light takes in falling on the face, and the white for softening that light after the direction of it has been secured.



POST CARD MATS

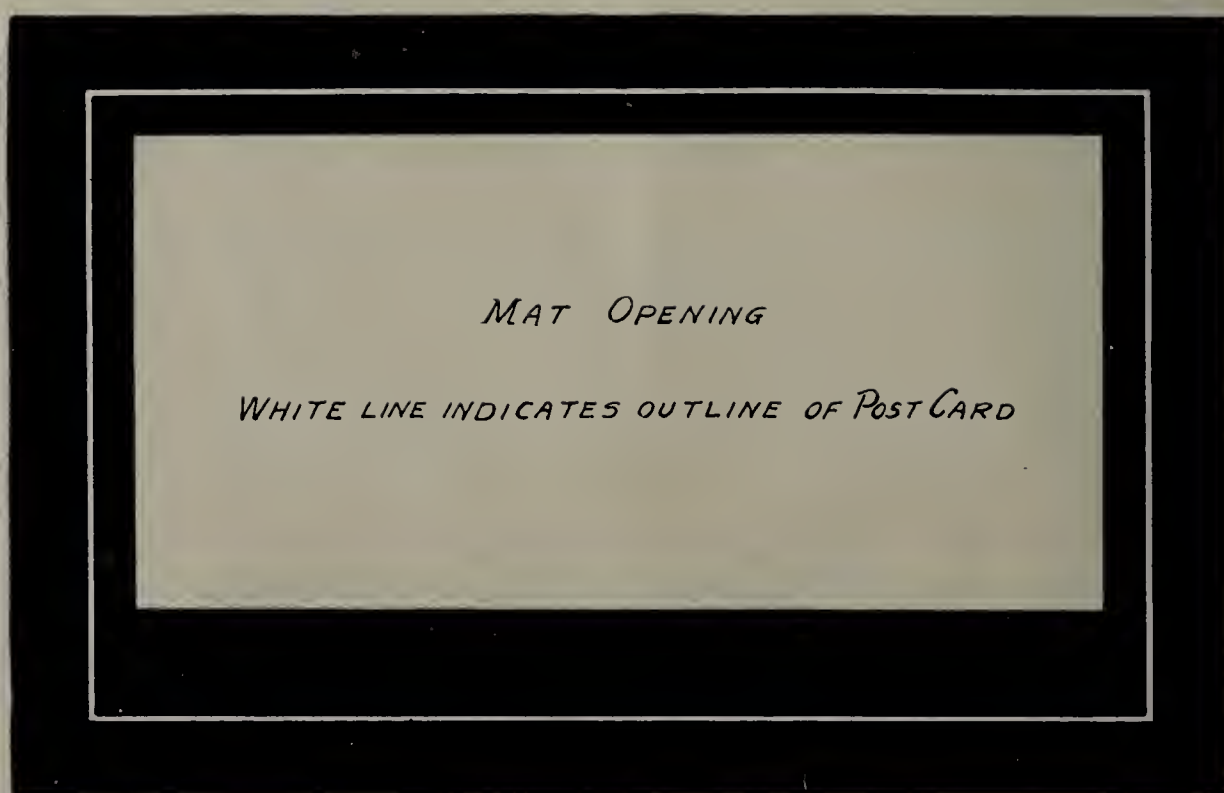
BY HENRY C. DELERY

THE Souvenir Post Card, though conceived only a few years ago, has come to be recognized as one of the most delightful innovations of the Twentieth Century. While it may to a certain extent be styled a fad, yet it is one not likely to wear off soon, and the enjoyment to be derived from the same is at all times increasing, and bound to continue. The practice is also not without its instructive features, for one is able by this means to gather together beautiful collections of the historic, interesting and notable places of the wide world.

To the camerist it has its particular charms, and the ease and facility by which they can be produced appeals to all. With the present day appliances in photography, one can snap a view, develop, and print the same on a ready prepared post card and mail it to one's

friends on the very day that it was taken, affording an inexpensive, yet pretty souvenir, which often expresses more in its simple mirage of nature's beauties than ever pen can describe. And the thought that the little missive is the work of the sender renders it more precious and more likely to be appreciated by the recipient.

Apart from the sentimental side, the beauty of one's work is always enhanced by the degree of perfection by which it is done, and to print a picture on a postal so as to fill the whole card without a margin or space to express a few words of greeting really mars a great deal of its attractiveness. Mats or masks of different shapes and sizes, appropriate to the style of the picture are employed. These I find, unless properly prepared, are the source of much trouble, especially in centering the picture on the card, or printing it so there will be equal and



straight margins on all the sides. Owing to the nature of the card, it is impossible to centre the picture by looking through it against the light, as can be done with thin paper, and unless some means are employed the setting of the mask becomes mere guess work, often resulting with the defects above referred to.

To obviate all these troubles, I have devised a very simple mask in which the placing of the picture in its proper position is a certainty at all times, and is very readily adjusted. The mat must be made of some opaque paper; needle black or yellow post office paper, if of sufficient opacity, will answer the purpose admirably. The cut out of whatever shape desired is first drawn upon the paper, and then the exact size of the post card to be used is laid out around it,

so that a suitable margin is obtained. These lines indicating the post card are then drawn very thick with black ink, or white if the needle black paper is used, after which the mat is cut, first the opening for the picture to print through, and then the sides a short distance from the lines of the post card, so as to leave a sufficient margin; this is shown in accompanying illustration. When ready to print, the mat is simply placed on the negative over that portion of the view which is selected, and held in position with the thumb placed on the margin. The post card may be adjusted so that the edges will coincide with the lines drawn on the mat, and we can rest assured that the resulting picture will be straight and true, and well centered on the post card.



A RAP FULL

By A. N. Cook

INTENSIFICATION

BY J. P. REYMOND

HOW many negatives have you thrown away that were just full of detail but lacked force? Perhaps they were weak or thin in opacity, and gave you unsatisfactory prints that were flat and without contrast.

Did you ever notice that these exposures are the ones that are hard to duplicate? That's usually the case. Don't throw any more away, however, until you have tried intensification. Intensification is the thing for bringing out and improving the printing quality of weak, over and under-timed or under-developed negatives.

Unfortunately, intensification has been considered by some photographers as a last resort for remedying negatives otherwise unfit for use. This idea is wrong, and is undoubtedly based upon

an experience with intensifiers and methods that were crude, troublesome, impermanent and altogether unsatisfactory.

Proper intensification should be a routine after treatment, by which you can make your negatives,—good, bad or indifferent,—give you the results that you wish in your prints. You can obtain results from intensification that cannot be brought out in development. Proper intensification builds up weak shadow details in the same proportion as the denser deposits, and gives good printing negatives from plates which are thin from over and under-exposure or under-development. Negatives which are full of detail but weak or thin in opacity, with weak contrasts that give soft, flat prints, when properly intensified are built up and acquire a printing quality that is full of force and brilliancy.



It is a physical impossibility to control all the factors which go to make up the perfect negative (plates and films, exposure and development) and bring them into perfect harmony. Printing papers differ in their gradation capacity, consequently demand negatives that are suited in printing density and range of contrast. At times subjects cannot be given the exposure required to secure the requisite amount of density by development, and then some subjects like low-relief carvings are feeble in their light and shade contrasts. As long as these conditions exist, after treatment by intensification will be absolutely necessary for best results.

If you have never tried intensification, the results will be a surprise to you; but if, on the other hand, you have tried it and your results have not been satisfactory, you have not tried the right intensifier.

Probably many who have followed the usual methods of intensification laid down

in the books have objected to handling bichloride of mercury (corrosive sublimate), and have also found the manipulations and the several washings too cumbersome and far from satisfactory. Fortunately, there are now several intensifiers supplied by the dealers in photo supplies, and of these I have found Simplex the most convenient, powerful, rapid and certain.

The print which accompanies this will demonstrate what proper intensification will accomplish. It has been generally considered that intensification will in a short time destroy the negative. This is doubtless the case where the manipulation is faulty or where a poor working formula is used, but a negative can be intensified and be absolutely permanent. The negative from which this print is made was intensified fifteen years after development, and this print made two years after intensification. The intensification being done by using the Simplex formula.



MOTHER GOOSE

By C. H. Gardner

COPYING DAGUERREOTYPES

BY J. A. ANDERSON

IN this process some points are to be observed which are not mentioned in the article "*How to copy a Daguerreotype*" reproduced in the PHOTOGRAPHIC TIMES of January, 1906.

Owing to reflections from the cover glass and spots often found on its under side, the glass must first be removed. A few taps of the open case on the open palm will usually release the picture from its case, when cutting the binding paper liberates the plate from the glass. Care must be used to avoid touching the plate, as a touch of the finger or even a drop of moisture, will leave a mark on the delicate surface.

As to defects, scratches and some others cannot be remedied and for eliminating these we must depend upon work on the negative or print.

If the picture has been properly finished, loose dust may be removed by a very soft brush of camel's hair.

The article referred to speaks of the removal of grease and silver oxide. I have not met with grease, excepting perhaps from finger marks. I have not tried to remove these with alcohol, as the article suggests, but there is no harm in trying. As to silver oxide, in a properly finished Daguerreotype the silver is protected from atmospheric effect by a thin film of gold. If not "gilded" the silver is exposed and the application of potassium cyanide, as recommended, may be needed. It must be noted that a picture not "gilded" will be ruined by the most delicate touch of the softest brush.

I do not remember to have met with any Daguerreotypes not finished in the usual way, although there may be such, which would show a "faded" appearance. The "gilding" gives protection

and brilliancy, with permanence. I have some which I made sixty years ago, which are as bright as when made.

If a plate is treated with liquid of any kind, it should be rinsed thoroughly with water and dried over a spirit lamp, holding with pliers by one corner and drying from the top, without stopping. Any stop will leave a mark.

When ready to copy, fasten the plate to a board by tacks at the edges and set the board up securely in a side light. To prevent reflections, use the black funnel, suggested in the article referred to, or, if more convenient, a black paper set up at one side of and below the lens. With the latter it will be necessary to turn the plate a little down and sideways, so as to face the paper. There should be means for easily making changes in position without danger of the plate and its support falling. My own plan is to hang the supporting board to a light strip attached to the side of a small box, which may be turned or tipped as required.

A Daguerreotype presents objects in reversed position as to right and left. Few observe this in portraits, but in landscapes and some other subjects it is very apparent and a reversed negative must be made.

This may ordinarily be done by a single exposure, by using a thin film, such as the Kodoid "plate," which may be reversed in printing.

In pictures of buildings it may happen that the vertical lines are not parallel and should be made so in the copy. This may also be effected in the first exposure, by tipping or using the swing back, or both. The image, however, is often so indistinct that it is out of the question to measure on the ground glass for parallel-

ism and some other procedure may be necessary.

The writer had occasion recently to copy a Daguerreotype taken about 1853, of an old church building, in which the image was so dim that it was almost impossible to get it in such position that the eye could see it. There were also irregularities in the plate which caused spots of reflected light and, owing to the upward pointing of the camera without the use of a swing back, which the camera probably did not possess, the sides of the building were far from parallel.

Success seemed doubtful and it seemed best to get after some kind of a negative showing the image, leaving the other points for later effort.

Using the black paper the reflections were quite fairly gotten rid of and a tolerable negative obtained. This was copied by transmitted light, tipping it so as to present the sides of the building in proper parallelism, their convergence being too great for correction by the swing back.



OLD CHURCH FROM DAGUERREOTYPE

By J. A. Anderson

The positive thus made was on a Kodoid film, which being reversed in printing, gave a final negative by contact.

The risk of loss of light and definition at each step is to be considered and in a well equipped studio, with experience in overcoming the special difficulties, the operation might be shortened. These details may, however, be of use to those who have but little of such work, with only a camera and tripod, as in my own case.

Blocking out the sky to cover some defects from the original, and introducing some clouds in the final print completed the job.

This while not exactly "pictorial," gave a good representation of an old church, which mounted with one of the edifice which succeeded it and portraits of a father and son, who had been successive pastors for forty-five and twenty years respectively, gave great pleasure to some old people, including the writer, who had worshipped in both buildings and under both pastors.

After copying a Daguerreotype, the cover glass should be cleaned and all put together as before, with adhesive paper well over the plate on the back and trimmed even with the surface of the glass. The whole is then restored to the case.

The camerist will find much satisfaction for himself and his friends in copying the old Daguerreotypes found in most families. Such copies make admirable additions to the genealogical records which many find an interest in making. The interest is further enhanced by adding pictures of old buildings or furniture and other old time relics, including letters and signatures, as found in deeds and other writings.

There is here a large and interesting field for the amateur who may have exhausted, for the time, his resources in search of the picturesque.

A SIMPLE LESSON IN MOUNTING

BY H. MUDIE DRAPER

IT is the writer's lot, in the course of a year, to see and criticise a good number of beginners' prints, and it has been a matter of surprise to find how few have mastered that really simple process of mounting. Chiefly I find that the faults are these: Prints trimmed unevenly and mounted crooked; the face of the print smeared with mountant; and prints placed in the wrong position on the mount. Now all these errors can very easily be remedied, and there is really no excuse for making one of them. Mounting is usually the last process which a print undergoes, and it is really a pity to spoil a thing at the last stroke. After all the care of selection, development, printing and toning, to spoil a print by bad mounting is very sad. Careful mounting, judiciously done, often makes a picture; careless mounting frequently mars one. Just as much attention should be paid to the selection and use of the mount, as the selection and taking of the picture.

First, then, as to choice of mounts. There is a bewildering variety. Remembering that the mount is secondary to the print, and is put there for two purposes, first to support the print, and secondly to isolate it from its surroundings—anything in the nature of a fancy mount must be excluded. Nothing would annoy me more than, after having trotted out a favourite print, to hear someone exclaim, "Oh, what a pretty mount!" I should feel that that was a failure. Mounts should never draw attention to themselves, they should throw all the attention on the print. "Slip-in" mounts are only a concession to laziness. It is very seldom that a print well trimmed is of the exact size or shape to "slip-in" or "paste down" on any of the trade

mounts. The best way therefore is to make your own mounts. In our opinion there is nothing nicer than to purchase a stock of coloured mounting papers and boards, which can be had very cheaply from any dealer; they can then be cut to suit any size or shape of print. There are a variety of colours to choose from, the greens, browns and greys being the most serviceable. They can be had in the usual cut sizes if necessary, and in thickness varying from thin paper to six sheet board. The prints can be pasted down directly on such mounts; a line or two lines drawn round with a crayon pencil—never use ink on mounts—or a sheet of paper a little larger than the print, can first be pasted on the mount of a different shade, and the print pasted on that, so providing a border.

Having selected the mount, our print wants trimming, scissors for this purpose being of no use. A pocket penknife is just the thing, but an oilstone should be kept handy, and the edge of the knife sharpened from time to time. Don't be afraid of trimming well, cut away everything that is not absolutely necessary to the composition. The half is sometimes greater than the whole. Blank foreground is very uninteresting. With P. O. P. prints I find it much easier to do the trimming before toning, as the prints lie much flatter, and really there is no need to waste gold by toning a piece of print to be thrown away. With other printing processes, trimming must necessarily come after development.

Support the print on a piece of glass or zinc, plate glass if the former be chosen, and now take a wooden straight-edge, such as can be bought from an artist's colourman for a few pence, and lay this on the face of the print to guide the

knife. Glass cutting shapes usually sold for this purpose have a knack of getting chipped, and are then of no use. Taking care that the knife does not cut into the straight edge, and commencing at the top of the print, make a clean cut. If the knife is sharp one cut will suffice. Hold the straight edge down tightly on the print, so that neither of them will shift. You will now have one edge trimmed perfectly true. Lay one edge of your set-square along this cut edge and cut the second at right angles to it, and so on until the four are done. You will find that all the edges of your print are clean and straight, all the angles right angles, and the opposite sides parallel. Now there's nothing very difficult about that, is there? And yet, alas! and alas! how many prints do I see every month with crooked and jagged edges!

Now before we paste the print, let us discover the best position for it to occupy on the mount. "In the centre," say you. Ah! but wait a moment. I'm not so sure that it should be in the centre; in fact, I feel sure that in the majority of instances it should not be there. Much will depend on the shape of our print. Suppose it happens to be dead square, and we are going to mount it on a square mount. If we put it right in the centre it will appear to be just a little below the centre, especially if we print a title beneath. The true position of the print is just above the centre. Let us take the usual oblong shape picture—an upright oblong to begin with. It should be placed in such a position so as to allow an equal portion of the mount to be seen at the top and the two sides, but a little more at the bottom. The same applies to the horizontal oblong. Scarcely anything looks as bad as a print mounted with more space left at each of the sides than there is at top or bottom. Never mount a print with sides and bottom equal and more space at the top; it is

sure to look ugly and top-heavy. Custom and taste have settled that the top and two sides should be equal, with a little more at the foot.

But we may make another variation; there are some subjects which are best suited if the top and left side are equal, and the bottom and right side are also equal but show more of the mount. This is quite a usual way of mounting prints—a broad margin on right and at foot, a narrow margin at top and left side. But this method should only be used when the subject requires some balancing on the right. If, for example, you have taken a portrait, and the face of the portrait is turned to the right, mount your print on the left side of the mount, but not if the face is turned to the left, or the subject will be looking out of, instead of into, the mount. If you have taken a ship sailing towards the right, then mount on left, but not if it's sailing to left. If a landscape with a mass of trees on right, mount on left. It is often said that prints should not be mounted on the right-hand side of the mount in the same manner as on the left, but in our opinion it all depends on the subject. There is no reason why a portrait with head turned to left should not be in the same manner mounted on the right, and so with land and seascapes. This is not so usual, however, as on the left. Evidently we are supposed always to hold a print in the right hand, and the extra margin on the right enables us to do so.

We have decided by trying our print in different places on the mount where it shall finally rest. Now comes the actual mounting. It need not be a messy job, and there really is no need at all to put any mountant on the face of the print. First of all wet the print by putting it into a dish of clean cold water. I know that many amateurs prefer to mount their prints dry, but I am convinced that it is much quicker, much cleaner and much

safer to mount wet. While the print is soaking, we will get the mountant ready. No, we will not use gum, nor glue, nor seccotine, nor anything so messy; we will simply use Higgin's Mountant, than which there is nothing so good for this purpose. If you use this your prints will stick, you can slightly move them if they are not quite in the right place when laid on the mount and if any of the mountant does get on the mount or print—and it ought not to—it can be wiped off without staining.

Now take the print out of the dish, turn it face downwards on a piece of clean glass, place a piece of blotting paper over it, and using the squeegee fairly hard, blot off all superfluous moisture. Your print will then look dry, but it will still be limp, and moreover, it will remain on the glass while you paste it, without any holding. If you have a lot of prints to mount, you can bring them out in a pile, one on top of the other, and all face downwards. Take plenty of paste on the brush, which should be a stiff one, and brush the paste well into the print. It won't matter if the brush goes over the

edge of the print; no paste can get on the face. Now using the point of a penknife, lift up one corner of the print and peel it off the glass. Holding it carefully by its two sides, lower it to its place on the mount. Over it lay a sheet of blotting—first noticing that the edges of the print are parallel with the edges of the mount—and now apply an even pressure with the squeegee, not too hard, but evenly all over, raise the blotting paper, and your print is mounted. Put it on one side to dry, and the terrible job of mounting is over.

If you are mounting on paper mounts, and want the print to dry quite flat without cockling, damp the mount as well as the print, and put both under pressure until dry; they will then be quite flat, only remember this cannot be done with bromide prints or P. O. P., or they will stick. Follow these instructions carefully—the writer has used this method exactly for years—and you will not be troubled by the process of mounting, and you will greatly enhance the value of your prints.—*Focus*.



Albert H. Moberg



STUDY

By R. S. Kaufman

A MAKER OF GUM PAPER ON THE PROCESS

EVEN the best workers in "gum" often go astray because they desire to get great depth of colour, and, on account of this desire, they sometimes use too much pigment, with the result that they get a very steep scale of tones as well as a gritty surface. Too much gum again—or what is the same—gum too strong, usually gives chalky high lights. The sensitiser cannot be too strong, however, and a saturated solution is usually used. The exposure (writes Mr. A. W. Hill, in the "Secretary's Letter" of the Scottish Photographic Federation) must obviously be such as will suit the process of development that the worker prefers or finds himself best able to accomplish.

For an ideal gum print—which is to preserve most of the tones of the negative, besides possessing that subtle something which only gum prints have, and which is usually termed a "running over" of the pigment—just sufficient exposure must be given as will keep the details in the high lights. If less exposure be given, the result is chalky whites and no detail in the shadows. If more, then the half tone and shadows are clogged up and the lucious ideal print is not. Gum printing, being very similar to water-colour drawing, the swelling of the film and the exudation of the unaffected pigment is the ideal method of development. There are other methods, not so much ideal, but eminently practical, all the same, for special effects, and these, especially brush development, should be utilised where necessary and desirable. But it will be found that brush-develop-

ed prints never have the lucious appearance that is the charm of the perfect gum print.

Always use some sort of actinometer when printing, because not only do you then know exactly when exposure has been correct, but if, by accident, over-exposure should occur, you will be forewarned and therefore forearmed when you come to develop.

During the experimental—or shall we call it apprenticeship stage?—it is a good plan to use up any spoiled prints by trying to modify the tonal values with the brush, by vignetting large heads, putting in clouds, or causing the distance to appear really distant, and not merely, as usually happens in the ordinary negative, simply smaller. It is in these valuable methods of control that gum scores over all other processes, and as they cannot be used successfully unless after considerable practice, it is essential that, along with perfection of coating and development, after-work on the print should have a great deal of attention. Indeed, unless the worker feels he can help his print after development, or during the same, he need not go to the trouble of becoming an adept at the preliminary stages. At the same time, once a worker really begins to get good results in gum, the process has such a fascination for him that he seldom altogether deserts it. And when he realises the extent of "help" he can give his negative by working on the print, his art-education has fairly begun, and in a short time he has placed a tremendous gulf between his old work and his new.—*British Journal*.

COLOUR PHOTOGRAPHY

BY EDWIN T. BUTLER.

C OLOUR photography is now an accomplished fact. The difficulties in securing results are still considerable, but when secured there can be no question that the results recompense for the extra trouble involved. Colour prints are now obtainable both as transparencies and as prints on prepared paper. Transparencies offer the most tempting field to the worker in three-colour photography.

By a convention, prints on paper are most in demand by the public, but to the lover of colour full satisfaction is only to be obtained in transparency work. No medium of artistic representation has ever offered such rich colour representation as is to be seen in dyed gelatine transparencies.

In oil painting the high-lights are frequently loaded with body colour in order to catch the light, and by this device the effect of brilliancy and sparkle is secured. While, on the other hand, the range in shadow is increased by transparent glazing permitting of the rich and subtle detail of half tone and deep shade.

Now transparencies, in a somewhat similar manner, by a wider range of light and shade lend themselves to the representation of even richer effects. A print on paper is shown by the light reflected from the white ground and transmitted through the overlaying colour. And this reflected light is necessarily weaker and of narrower range than that of transmitted light.

Transparencies transmit the light directly, the stronger light revealing details in a depth of shadow many times strong-

er than a tint which would appear black on a white ground. It is for this reason that three-colour photography is seen at its best in the superimposed triple films printed, and dyed in colours, each transmitting a band equivalent to two-thirds of the spectrum. This medium of expression is naturally adapted to the art, and one which in its own domain has added an unique feature to artistic representation. My own work in colour photography has been directed chiefly to the production of an instrument which at one exposure should yield triple negatives, each exclusively registering one of the three elementary colours of the spectrum.

A ONE-EXPOSURE CAMERA.

All the examples of my work shown in the exhibition have been taken with a camera I designed with this object (see the *B. J. Almanac*, 1905, p. 856). Through a single lens the red, blue, and green negatives are simultaneously exposed, the varying ratios being corrected in intensity, so that the exposure for each negative is the same in time.

The results exhibited are from negatives taken either by my quarter-plate or half-plate camera.

The quarter-plate camera is sufficiently compact to carry about in ordinary photographic excursions, and I have not infrequently in the course of a walk been struck by a subject, unpacked the camera and stand, exposed the plates, repacked, and continued my journey in from five to ten minutes from the time I was arrested by the view.

EXPOSURES.

For portraits and evenly-lighted landscapes with strong foregrounds, the time

of exposure should be equal to that required to change P. O. P. to the standard tint.

For ordinary landscapes I expose half actinometer time.

For brilliantly-lighted landscapes one-fourth and one-sixth of actinometer time, and as short as one second for afternoon sky and cloud effects.

I have secured fairly satisfactory results of sea and cloud in one quarter of a second.

It is unnecessary to consider the ratios of exposure when using my camera, the screens and their position in the camera regulate the comparative degree of light each plate is to receive.

I find the negatives come out with a very fair degree of regularity when the time of exposure lies between say 10 and 15 seconds and 3 or 4 minutes, although very longer exposures are practicable.

It is as easy and simple with a single-exposure tri-colour camera to take views as with ordinary snapshots, but after this the difficulties commence.

DEVELOPING THE PLATES.

Development of the plates is a process identical with that of ordinary development for black and white, but in so far as three negatives have to be produced for one subject, and each has to bear a correct ratio to the others, certain details have to be observed. Each of the three negatives should as nearly as possible exhibit in the highest light, white, the same degree of density, and the range of density from white light to deep shadow should be similar in each. The negative taken through the red screen, as a matter of fact, is usually steeper than those taken through the green and blue screens. The best results are secured when the period of development for each of the three negatives in the same developer is constant, but when exposures have been made under anomalous and

difficult conditions a little latitude for approximate correction is permitted by varying the relative time of development. I generally find two or three minutes development sufficient with metol or edinol developer.

PRINTING THE MONOCHROMES ON DYED GELATINE FILMS.

Having obtained promising negatives, I have found it convenient to gauge their densities, and for this purpose use a density gauge, by means of which the greatest density (high light) of each negative is matched to a standard. The numerical equivalent is noted on each negative, and this is an index to the actinometer time required in exposing the positive. For printing the positives, thin glass plates coated with gelatine and subsequently dyed to a standard in an appropriate aniline dye are used.

They are sensitised by immersion for three minutes in a 4 per cent. solution of potassium bichromate, and dried quickly in the dark. The colour of each positive plate is complementary to the taking colours of its respective negative.

The negative taken through the red screen is printed on blue-stained gelatine-coated thin glass, though greater sharpness is given if a black tone positive be converted to a ferricyanide blue. This is effected by bleaching in potassium ferricyanide and treating the bleached image with ferric chloride.

The negative taken through the green screen is printed on pink-stained gelatine, while the negative taken through the blue screen is printed on yellow-stained gelatine, with which the respective plates are coated.

Each positive should be printed so that the gradient is the same in each. The positive plates are placed with the back next to the face of the negative, and printed through the back of the glass. It is advisable to expose the printing frames in short tunnels to cut off side light.

If prints are made in direct sunlight, the face of the plates should be at right angles to the axis of light. In developing the prints, they should be washed for a few minutes in cold water to dissolve out the sensitiser. They should then be allowed to remain without rocking in hot water about 100 to 120 degrees, which dissolves the unaltered gelatine, and leaves the image in colour. When sufficiently developed they are set in cold water.

Having made sure that the relative strength of colour on each is properly adjusted to the other two by re-dyeing or washing out, when it is necessary, the elements are allowed to dry, and are then put together.

I prefer glass plates to films, because I find them easier to manipulate at each stage of the process, namely, in staining, sensitising, printing, developing, and registering. The slide or transparency is made by simply putting the blue and red prints face to face, and the yellow print with the face towards the back of the red, the whole being held together temporarily with clips until the corners are fixed with adhesive and the edges bound.

To get all three elements in intimate contact, the yellow may be transferred to the blue print and the red placed with its face to the face of the blue-yellow positive. Some of the prints exhibited are made in this manner.

It is not necessary to balsam the elements together.

The method of printing I have adopted is one which I have selected after work-

ing most of the methods currently in use. For the reasons given above, I prefer transparencies to prints on prepared paper, but as is well illustrated in the exhibition, exquisite results are yielded by the latter method. It is probable that a wise eclecticism will in the end yield the most facile and correct results.

My own experience is that which ever method be adopted, difficulties are experienced. I have thought there was a gain in using gelatine-coated plates from which a sensitive silver salt was omitted, since there is a saving and simplification in the omitted need for its removal. If the silver salt, which merely serves the purpose of following the development, be omitted, it is needful to substitute some reagent which shall serve this purpose, and the natural agent which presents itself is the dye in which the print is finished.

Certainly in my most successful endeavours this method has yielded results in the most direct manner. Each element dyed to a standard, and properly exposed behind correct negatives, has under correct exposure and development yielded satisfactory results without either washing out or re-dyeing.

Such an achievement, could it be insured with anything approaching invariability, would be both simple and direct, but the varying conditions under which colour photography is practised necessarily in the present stage of the art leaves mechanical accuracy and facility a goal still greater to be desired.

—*British Journal*.





PLAYING "CHOO CHOO"

Flashlight By Ed. Kottmann



FLASHLIGHT STUDY

(Copyright)

By Ed. Kottmann

A CHAT ABOUT POSING

BY CARINE CADBY

ONE of the faults of a good deal of genre work is that the figures are sometimes lacking in the grace of spontaneity and are apt to look a little stiff. Everyone who has attempted this branch of photography knows the difficulty of posing figures. He will see a model in a most charming and natural attitude, but the minute he asks her to repeat the same in front of the camera all charm vanishes, and the pose becomes a caricature of what was at first seen. With children it is almost as hopeless; they can become absolutely wooden, and the poses perfect travesties of childish grace. And we all know how useless it is exposing a plate when this is the case, in the vain hope that it may not come out as bad. Alas! experience teaches us it will come out probably a good deal worse. If the camera can make even a fairly easy pose look stiff and unnatural, it will hardly be more lenient to one starting under adverse circumstances.

Very many portraits are stiff, but somehow one feels less inclined to carp at them for one supposes knowledge on the sitters' part that they are being taken, in fact are sitting still on purpose, but in figure study and genre work the very last thing one wishes to suggest is that the model is accommodately keeping still to be photographed!

Of course, the great bane is self-consciousness. It not only changes faces and ruins expressions, but it utterly spoils poses. It can be writ large over a figure just as evidently as over a countenance, and unless the model can vanquish this enemy, the photographer will struggle in vain with pictorial work. And it is not at all a matter for despair, only for

a little practice, and often the most self-conscious models will learn to pose so that they will rejoice the photographer's heart. The great thing is to give people something to do, and let them overdo the doing of it. Photography is, in this matter, rather like the stage, and often requires a little exaggeration of attitude to be convincing. One must always be very realistic—if the model is to be picking flowers, flowers she must really pick. It is no good pretending; she must go through the performance, whatever it is, slowly, over and over again; and it is the photographer's business to watch for an attitude. When he has seen it he should call out, "Stay like that," and focus while the model stays. Stiffer and stiffer will become the attitude, more strained the back, and more aching the arm; never mind, it is good enough for focussing. When this is over the model can have a good stretch, also complain loudly, if it is any relief for cramped feelings; then when stretched and rested the pose can be resumed and the plate quickly exposed.

However interesting it sounds to say the model was quite unconscious when he or she was being photographed, and really knew nothing at all about it, it is a very risky proceeding, and only in very rare cases successful; as a rule, the model knows all about it, and has probably been a very interested and hard-working helper.

With children the case is rather reversed. A child, unlike a grown-up, cannot act appearing unconscious. It is no good in this case for the photographer to watch and ask his little model to resume a pose, for he cannot go back with any ease or naturalness. The only thing possible—if the light is not good

enough for instantaneous work—is to ask the small person to “keep like that for a moment,” and it must in very truth be but a moment, for how quickly does life and animation die out of face and attitude, even without any perceptible movement, and all spontaneity is lost!

People talk of the difficulty of posing a child, and whoever would be so foolishly daring to attempt it deserves mountains of difficulties. The only person who can pose a child is the child itself. Let it once become interested in a great game or amused at a story, and the pose will come of itself; and with a child the attitude should be so simple and natural that pose is hardly the word it should suggest.

It is almost as difficult for a small as a big person to stand facing the camera with nothing to do, and often a most paralysing rigidity of attitude is the result. With a child one has the advantage of being able to break up the stiffness by giving the little model a

jump into the air, and letting her stand just where her feet touch the ground; this relaxes all muscles, mental as well as physical, and, so to speak, clears the photographic air. Grown-ups, alas! cannot be swung playfully off their feet and merrily plumped down again on the floor, but they can break up their stiffness by walking away, taking deep breaths, having a good stretch, and then coming back to start again.

Amateur models, relations, and friends of photographers are an enduring and unselfish race. They will stand, often bend and bend in the most strained and cramped attitudes for the camera man to compose his picture. It is pathetic to see what often unnecessary trouble these patient people give themselves when they are ignorant of the camera's demands, sometimes a smile, only needed probably for a second, being worn heroically for whole minutes, while the photographer is busy getting his background into focus.—*Amateur Photographer.*



A MORNING'S CATCH

(SECOND AMERICAN SALON)

By Margaret Bodine and Nina F. Lewis

RETOUCHING LANDSCAPE NEGATIVES

BY ARTHUR WHITING.

IT frequently happens that landscape negatives are most disappointing owing to numerous eccentricities of varying or unsuitable light, wind, moving figures, etc., yielding results undesirable in the extreme. And whilst many spend a vast amount of time endeavoring to atone for the caprices of fate by chemical manipulations, it is not a wonder that so few place their landscape negatives upon the desk, and with pencil, stump, and knife engrave their knowledge of art upon the luckless film?

A few weeks ago the B. J. published some sinister remarks as an extract from *T. P.'s Weekly* about "Photographic Artists" in which the term is ridiculed on the ground of Ruskin's definition of art, "Human labour regulated by human design."

Now, the veriest tyro will agree as to there being plenty of the former in a photographer's work; but surely it is a fact that the latter is neglected to a large extent. Yet I venture to submit that, notwithstanding "faking" is a very ugly name, it does, and will, aid the photographer immensely in proving that his craft is an art after all; and, personally speaking, I like to see the work of a man who is not only an "artistic photographer," but a "photographic artist" as well, for then he will not only choose and arrange his subject with artistic ability, but the resultant picture will have lost its mechanical or so-called "photographic" appearance.

The chief defects to be looked for in landscape negatives from the negative artist's point of view are:—Halation: Too much or too little intensity of light

or shadows; lack of clouds in landscape or through over-exposure of sky; moved figures and trees; undesirable loss of detail through haze; spots, light streaks from faulty dark slides; fog; imperfect lighting of subject, etc. All these defects can be more or less remedied by skilful handwork upon the negative. The order of such work should be: First, knife work; secondly, rubbing down; then fine pencil work on the mediumed film, and "splatter" work (if any). Then, after varnishing, stump pencil and brush work, matt varnishing on back, puttying, etc.

The knife will be chiefly required in removing specks, harsh lights on leaves, and for sharpening up moved figures. In doing the latter cut away the doubled outline on the denser portions, and put in with light touches such shadow detail which has been marred by the movement.

It is well, on commencing work, to decide concerning the massing of lights and shadows, and obliterate or subdue any little irritating patches of light with the knife, or by rubbing down. The latter process (described recently in an article on "Retouching Negatives of Interiors") will be used to remove fog, halation, and to reduce hard lights and streaks of light crossing the negative through using a faulty dark slide. The latter is a very difficult thing to rectify, and whilst it is best to operate upon the broader patches with alcohol and tripoli, the narrower portions should be negotiated with a somewhat pointed indiarubber charged with dry tripoli powder. However carefully the streak may be removed, it is more than likely that a fair amount of pencilling and stump work will be required over it afterwards to remove all trace of it.

In attacking hard lights full consideration must be paid not only to their intensity, but also to the range of gradation from highest light to deepest shadow, and it is in little points like these that a dual knowledge of the art and science of photographic manipulation become more fully necessary. For he must be an artist who would retouch successfully a difficult landscape negative, and, indeed, he must be more. He must be a photographer to understand just what to do, so that he becomes a "photographic artist," whether the "knights of the brush" like the term or not. The artist will, therefore, from both points of view, allow his knowledge to direct him in manipulating these masses of light and shade. After reduction has been satisfactorily accomplished rub medium over the film, and upon it pencil up all detail which needs strengthening adding such matter as may be desired and conveniently produced with pencils, which should be sharpened in two ways—a round and moderately fine point, similar to that used for ordinary drawing purposes, and a flat-edged chisel-shaped one, the latter being specially useful for putting in detail in foliage.

To operate on the trees successfully observe their nature botanically, and use the necessary form of touch to depict them, as you would in making a pencil drawing; only, remember you are working upon a negative, and not a positive. Sometimes you will find it convenient to use the broad and sometimes the narrow surface of the chisel-edge (pointing downwards) so as to enable you to make broad or narrow touches. Approximately, for oak, beech, and elm trees use the broad edge, and for fir, ash, chestnut, larch, pollard, willow, and yew use the knife-edge. Whilst probably the round-pointed pencil will be most serviceable in making the touches for birch, silver birch, weeping willow, and poplar trees.

SPLATTER WORK.

Splattering is a method of applying splashes of paint to lighten portions of a negative, or to represent shingle, stones, flowers, snow, etc. To apply, first lay the negative almost flat on a table, but inclining slightly towards the operator. Cover every part not requiring to be splattered with bits of paper. Then take a fine bristle nail or tooth brush, which after being dampened, has been lightly charged with liquid indian ink, indian red, or "photopake." Then, holding the brush over against the negative, bring the teeth of a small-tooth nursery comb smartly over its surface in the direction of the operator, when a spray of splashes will migrate from the brush to the negative. When the work is applied over grass it will, with a little subsequent pencilling, give the appearance of flowers, of shingle if applied over paths or roads, or of waterweed and lilies over water. Some skill is needed to cause the smaller splashes to be deposited over the parts of the scene farthest away from the camera, and the larger ones in the foreground.

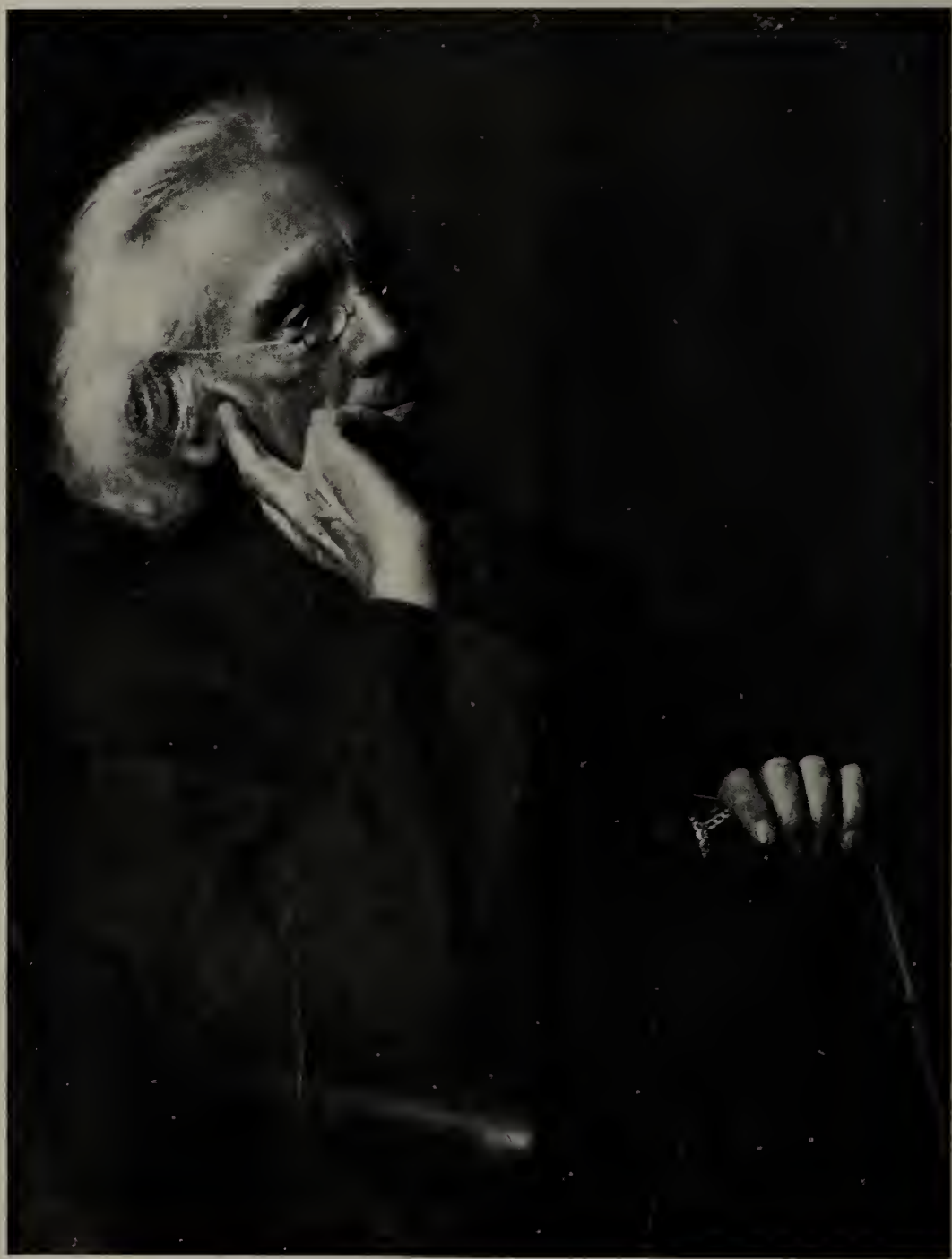
Before proceeding to varnish the negative it may be useful to knife in some herbage, water-reed, or water-ripples to complete the harmony of the scene. After varnishing with matting varnish rub down and stump up the high-lights and shadows where necessary, finishing with pencil or brush work, and putting in lights over knifed portions, or, still further, working up trees and herbage so as to bring out from the rest of the subject such parts as seem (from an artistic standpoint) to need it.

When all has been done on the film it is seldom necessary to apply yellow putty or matt. varnish to the back of the negative; but it is obvious that, should it be desirable, much additional help can be rendered by such means.

I have said nothing about treating skies and putting in clouds, for this must be reserved for a future occasion.

In conclusion, it may be mentioned that

many find actual brush work on the negative an additional and valuable aid in converting mechanical impressions into pictorial effects.—*British Journal*.



THE LAST LEAF

By George Donehower

A METHOD OF DEVELOPING ENLARGEMENTS

BY C. WELBORNE PIPER

MORE material is probably wasted in the process of enlarging than in any other method of producing prints for even experts seldom produce quite satisfactory results at the first attempt. Bromide paper in large sheets is expensive, hence any method of working that diminishes waste is well worth consideration. Of the several things that contribute to failure perhaps the most difficult to deal with is want of uniform printing quality in the negative. With landscape subjects, especially, this defect very commonly exists. There is nearly always some portion of the negative that is either so thin as to require screening in exposure, or some portion that is so dense as to require extra exposure. Further, the printing in of a sky from a separate negative often complicates matters, for it seldom happens that the sky and landscape negative both require the same exposure. If we have to print from two different negatives, and also have to "dodge" the printing of one of the negatives, it becomes almost impossible to so arrange the various exposures as to produce a result that will develop up at the same rate all over. Some part of the enlargement will almost certainly require local treatment in the developing process, and such treatment will very probably spoil the print altogether, unless it is very carefully applied. The following method is a simple and easy one, and gives the greatest possible chance of success. It is perfectly safe, and if success is possible that fact is discovered within a few minutes from the start of the operation. Provided that all parts of the image have received sufficient exposure to render them developable, and no parts have been badly

over-exposed, you can be certain of a good (not simply a passable) result when you have had a little practice in applying the method.

The first matters for consideration are the preparations for development. The developer must be one that will not act too quickly. One that will completely develop a normally exposed image in less than a minute is unsuitable, and if that is the kind ordinarily used it must be diluted, and restrained by adding bromide, so as to prolong its action and delay the first appearance of the image for at least ten seconds. Prepare a liberal quantity of the developer, and also put into a separate measure enough clean water to fill the developing dish to a depth of three-eighths of an inch. Then arrange a level support for the dish so that water standing in it may have an approximately equal depth all over.

Next comes the exposure, and, as said before, it is essential that all parts should receive sufficient exposure to render them developable. You are not likely to give precisely the right relative exposure to different parts, but this defect will be remedied by the method of development adopted, whereas want of sufficient exposure is beyond any remedy. You must also avoid excessive exposure in any part, for appreciable over-exposure is also beyond remedy in most cases. The commonest mistakes made are the underestimation of very dense or very thin parts of the negative; the one being given too little extra exposure and the other being insufficiently screened during exposure. If you aim at slightly overdoing the correction in each case you will probably get near the best possible result.

Having exposed, soak the print very

thoroughly in clean water, and then lay it flat on the bottom of the empty dish. Pour on the developer, taking special care to flood the print evenly and quickly. Rock the dish for three or four seconds, then, as quickly as possible, pour off the developer and replace it with the clean water from the second measure; pouring on the water in precisely the same way as a developer. Note that the developer must be poured off *before the image has begun to appear*. Put the dish down on the level support, and by the time you have done this you will probably find that the image is well out, at any rate, in more fully exposed parts. The less exposed portions will not be fully apparent, and may even be represented by blank paper, and the next proceeding is to develop up all such parts with a soft camel hair brush charged with the developer and applied to the print *through the water*. The presence of the water will not prevent the action of the developer, but it will absolutely prevent the appearance of stain or of hard outlines, hence this brush treatment may be continued as long as is necessary with perfect safety.

When the less exposed parts are sufficiently developed, the water is poured off the plate and replaced by the developer, and the print is finished off in the usual way. There is, however, an important point to notice. If the less exposed parts are only brought out by the brush to the same stage as the more fully exposed parts, they will again lag behind when the developer is re-applied, therefore they should be developed up with the brush until they appear to be far more completely developed than the rest. The final development will then bring all parts of the image up to the same finished density in the same time.

If any portion of the first image appears to be veiled or fogged it is a sign of over-exposure in that part. If the effect is only slight it may be remedied

by applying a little weak bromide solution to the part with the brush just before the final developer is poured on, but if bad over-exposure is apparent it is best to make a fresh print. It should be remembered that the first image is much under-developed, and, therefore, usually presents the appearance of slight under-exposure. If it seems fully out slight over-exposure is indicated, and it is advisable in that case to apply weak bromide solution. The appearance of even the slightest fog denotes over-exposure of a more serious description and stronger bromide is necessary. In the latter case a five per cent. solution may be used; in the former, half that strength.

If the first image appears nearly right and no local treatment is necessary, you will, of course, at once reapply the developer in the usual way. If the whole appears to be fully out or slightly over-exposed you add more bromide to the developer before reapplying it. If the whole appears to be under-exposed the reapplication of the developer will soon show if this appearance is simply due to under-development or not. If it turns out to be actual under-exposure there is, of course, no remedy.

It must be understood that there is no way of remedying actual under-exposure, and that this method of development does not pretend to remedy it. Exposure must always be above a certain minimum, and the non-appearance of any image in the first instance may only denote that part of the print is relatively under-exposed compared with the rest. The one part may have received an exposure only just above the minimum, and the rest an exposure some way above the minimum, the first part then lags behind in development and the most that this method of development accomplishes is the bringing up of that lagging portion to a stage in which it will develop as rapidly as the rest.

—Focus

THE BACK OF THE NEGATIVE

BY FREDERICK GRAVES

THE amateur, as a rule, is well up in the process of after-treatment, intensification, and reduction; but few, I think, have much idea of the power that lies in their hands in the way of control from the back of the plate.

There are few negatives that may not be improved by working on the back. Papier-minéral, tissue, tracing, and other papers have long been used in this work, and these are manipulated by cutting and scraping, chalking and blacking, according to the requirements of the particular negative. To my mind, however, there is nothing to beat a gum varnish, such as

Gum sandarac, 1 oz.

Gum dammar, 1 oz.

Ether, 10 oz.

Benzole, 5 oz.

The gum sandarac and dammar are dissolved in the ether, and the solution is filtered or decanted from the residue, and then the benzole is added. The quantity of this latter will depend on the consistency of the varnish we want, for we may make it either thin or thick, and the result will vary accordingly in fineness or coarseness of the surface.

This varnish dries very quickly, though the art of applying it to the plate requires a little practice; probably most workers know how this is done, for the directions are constantly appearing in print. A small pool is poured on the centre of the plate, and this is allowed to run to each corner in turn until an even coating is given to the back of the negative we wish to work upon.

But the coating of the back does nothing particular for us; it simply retards printing, and this is, of course, far more the case when the varnish is coloured as with aurine.

Then the scraping away of the varnish from those parts we wish to force will give us considerable advantage.

Dragon's blood is another good colouring agent, and it is a good plan to have varnishes of different depths of colour.

Now, upon this varnished back we may work. The stuff may be scraped away from those parts that are dense, and allowed to lie over the clear places, in order to strengthen them.

Then we may work upon this varnished surface with powdered colour, with black lead or any form of pigment, and so increase the retarding power. Clouds that will scarcely come up from the plain negative may be strengthened in this way wonderfully, and other faint objects so brought into prominence.

On the other hand, not only in the case of the thin under-exposed plate, but in that of the flat over-exposed negative, this backing may be of service, and by adopting the reverse method of procedure, keeping the shadow clear, that is to say, leaving the varnish over the lights and scraping over the shadows.

But to work successfully in this way requires practice, and the amateur must not be downhearted and disgusted if his first few experiments are not great successes.—*The Amateur Photographer.*



PHOTOGRAPHS AS ADVERTISEMENTS

BY PUBLICITY

SO much attention has been given by photographers to different methods of turning their hobby to pecuniary account that I am surprised that they have not done more in the direction of advertisements. This is an age of advertising, and the business man who would not be left behind in the race for success must not only have a good article, but must continually seek fresh and effective means of attracting the attention of the public to it. He need not devise all these means himself; in fact, it would be poor economy to do so. It will pay him better to pick and choose amongst those that are offered to him, to decide which, in his opinion, are most likely to serve his end, and to arrange that the plans suggested shall be properly carried out. Already there are hundreds of people getting a living, and some a very good living, by designing advertisements. Some have a gift for evolving pithy sentences which cling to the memory like a limpet. Who does not remember one of the first of these—

They come like a boon and a blessing to men:

The "Pickwick," the "Owl," and the "Waverley" pen.

Or that still more famous if more modern unguent, which forced its way to our attention because "it touches the spot." Catchy phrases of this kind are literally jewels of speech, and have a commercial worth per word beside which the most highly paid literature is absurdly trifling. If it is not given to everyone to succeed in formulating epigrams of trade, there must be many who are in a position to do something effective in kindred directions; and it is to draw attention to one of these that ought to appeal to many

amateur photographers that the editor has asked me to give the benefit of my own experience to the readers of *Photography*.

THE MOST IMPORTANT QUALITY.

The most important feature of any advertisement is its power to catch the eye. Turn over the crowded advertisement pages of the most successful magazines, and you will find yourself stopping every now and then, quite unconsciously perhaps, to read what some advertiser has to say about his wares. When you stop like that, you are paying the designer of the advertisement the highest compliment in your power—you are admitting that his aim has been achieved. And the more the advertisements are crowded together, the more there are who are all doing their very utmost to get you to read them—*them* in preference to all the others—the greater is the demand that is made upon the skill of those who have to draw up the advertisements. Now while the power of a catchy phrase to lodge in the memory is admitted by everyone, there is equally a general admission amongst advertisers that there is nothing like a picture to catch the eye, and with modern methods of illustration and modern methods of printing, particularly modern processes for the reproduction of wash drawings and photographs, the advertisement that is made up entirely of type or reading matter looks as if it would soon be extinct. It is a case of the survival of the fittest; and the fittest, in my opinion, and in that of most people who are in a position to judge, is the combination of the picture to attract the eye, and the brief, pithy phrase to carry the message to the brain and make it stay there.

Strangely enough, the photographic advertiser is not the one to make the greatest use of photography. Probably this is only another case of the shoemaker's children being the worst shod. The general advertiser, whose name is legion, uses it far more extensively, and if he does not employ it far more, it is only because of the difficulty of getting the right sort of photographs. Now, the suggestion I want to make to those who read this article is—

WHY ARE NOT YOU THE MAN TO MAKE
THEM.

The professional photographer has his own form of business to consider; he has sitters to get and sitters to please, and if he is wise he will concentrate on the business which he has chosen. But the amateur is in quite a different boat. His amusement it is, or it should be, to make pretty and effective pictures, in fact, with certain reservations, exactly the kind of picture the advertiser wants to get hold of. The amateur photographer has his hobby in mind, I suppose, many times when his camera is not at hand and in use. Why should he not then think of subjects for it which will not only amuse him to take and be successful in securing the appreciation of his friends, but will also be saleable and give him increased opportunities of practising his hobby? The outfit necessary is nothing that most amateur photographers are without—a camera, preferably a stand camera—half-plate is quite big enough—and the knowledge of how to use it, are all the requisite plant. Over and above the ability to make a good clean negative and obtain from it a fair silver or bromide print, there is only one other necessary, and that is ingenuity and originality of idea. Now originality of idea is not like playing the violin—it is not to be learnt with great toil—but like

the ear of music, it is innate, and once possessed may be trained and cultivated to very great lengths. The photographer, therefore, who has any suspicion that he may have what is a gift of a decided commercial value is very foolish if he does not make a serious attempt to see if it is not actually the case that he has it. There is only one way to do this, and that is by trying. Let us see how such a thing may be set about.

THE FIRST STEP IS TO SEE WHAT IS BEING
DONE.

Let us get hold of the magazines in which there are advertisements employing photographs and look carefully through them. Some of the unillustrated advertisements may suggest likely subjects for an attempt, but they are best only noted at this stage, and the beginner who would push his way in should select the weakest place for the attack, and that place is at the advertiser who has already been converted to the use of photographs. Let two or three of these be selected, and the question seriously considered how a photograph might be got which would be likely to suit them. Remember it must not be a repetition of something they are already using, or it at once loses its greatest charm—freshness. It may carry on some idea already expressed, as in a recent case, which will serve to point the moral. Everyone has seen the dog looking down the funnel of the gramophone and recognizing "his master's voice," one of the most effective photographic advertisements I have ever seen, and one that should be well within the power of any amateur photographer who could get the idea to start with. A continuation of this same idea, but not so effective from the advertising point of view, was the dog darting back with horror when the instrument with a spurious record emitted

what the terrier took to be a false voice. Here we have a good case of the second design on the same primary idea, though in this particular instance the second fell short of the first. Still, it will serve as an example to explain my meaning.

THE SORT OF PHOTOGRAPHS TO MAKE.

Having settled upon the advertisement to attack, and formed an outline in the mind of the way in which it is to be done, the next thing to do is to make the photographs. In this department I expect my readers know more than I do; and all that falls to me to do is to caution them against one or two possible mistakes. Let them first of all remember that no advertiser I ever heard of has been educated in the fuzzy school, and if you send him a gum print or a portrait *à la* American you are not likely to reach his pocket. Save your bi-gum for the exhibitions, and let him have a clean, bright, well-toned and glossy surfaced silver print. In making it, avoid the amateurisms, which are just as patent to one who is not a photographer as to one who is. Do not let the figures have a makeshift or haphazard background—let it either play its part in the design, or be a plain even tint on which any lettering that is desired may be put. It is hopeless to expect to succeed by turning out old negatives or prints, and wondering how they may be made to fit later notions. Once in a blue moon one of these might find a purchaser, but its total price will not pay the expense of sending it round. No! think out some subject, if possible sketch out the arrangement you propose, and then do the best to realize your ideas.

THE POWER OF A PRETTY FACE.

As to models, I might write pages. Every advertiser knows the power of the pretty face, and there is no better weapon with which to make him stand and deliver. But it must be wielded properly, and there are plenty of photographs of pretty faces that are themselves not in

the least pretty, and do not suggest beauty. Then, again there are many very pretty girls who do not photograph well, and many plain ones who may be made to look very attractive in a picture. The photographer's friends are not only undesirable models in other respects, but he is most likely a very poor judge as to the way in which their photographs would appeal to an outsider. The best models, and here I can speak from experience are those who are encountered accidentally. Excellent models can often be secured amongst the ladies in travelling companies in the smaller towns, while factory and shop girls sometimes prove to be most excellent models in many respects, although their lack of knowledge of pose calls for more skill from the photographer. But best of all, both from their unconscious grace, from the fact that beauty is a far more general possession, and because of their invariable appeal, are children; and the photographer of tact and patience can make his work with these little models.

THE MOST ENJOYABLE OCCUPATION HE COULD DESIRE.

The mentioning of lettering reminds me that I have said nothing about this. It need not deter the photographer that he is unable to print or draw, for one who can think out a fresh, persuasive advertisement, there are fifty who can letter a photograph or paint on it subjects that have been indicated to them. Let a good silver print be mounted on a card, with a fair margin, and if any wording is necessary to carry out the idea let this be written on the margin, which is, further, handy for any suggestions as to the arrangement of the print with regard to letterpress, and so on. These should only be given if necessary. It is often far better to send in the print by itself, or perhaps with a couple of words beneath it, and trust to it making its own suggestion to the recipient. If he is a

smart man, and no successful and pushing advertisers can be otherwise, there is always the chance that the print will suggest to him some way of using it on different and better lines than the photographer originally intended, and any indication on the mount might only help to prevent this.

A FEW HINTS ABOUT SUBMITTING WORK.

Let this be done in as brief and business like a manner as possible. Having made the print, write on one corner of it "Copyright," as an indication that the design of it is your own, and that you mean to be paid for it. There is no immediate need to register the copyright as long as it is done before a deal is actually concluded, as registration fees would otherwise mount up unnecessarily, and every photograph produced as suggested in this article is, in the eyes of the law, the copyright of its producer, irrespective of its registration.

With the print send a short note stating that it is submitted as a suggestion for an advertisement, that the price of the print, negative, and copyright is so much, and that it will not be offered to

any other possible purchaser before such and such a date.

Do not fly too high first in the matter of price; remember that your earliest attempts are in the nature of experiments as to your ability to do this work, and do not risk the failure of an experiment from a desire to get a fancy price. A comparatively simple half-plate photograph, and all early attempts should be simple, is not either over or underpriced at half a guinea; afterwards, when you are satisfied as to the saleability of your work you can charge just as much as you can get.

Above all, do not be discouraged if at first the sale of photographs to advertisers does not prove a gold mine. After all, the work can be made every bit as interesting as any other branch of amateur photography, and if it is not remunerative, it is entertaining and may become so. Persevere and be not discouraged, put your best thought into the work and your utmost skill to conceal the fact that there is any thought in it at all, and if the gift of originality is lurking anywhere in you it will out.—*Photography.*



PLAY

By C. H. Gardner



IN COSTUME

By Carle Semon

EDITORIAL NOTES

The first step on the road to success is to simplify to the greatest possible extent the means employed to secure results. Select one brand of plates, one developer, and one printing process, and study the possibilities of each so you will know absolutely just what each will do under a given condition. When you can procure a good negative and make a good print, you are a long way on the road, then perhaps you may begin to experiment a little, but the more you experiment, the more you will be convinced that the directions and formulae given by the manufacturers were compounded by men who knew what they were doing. This advice is as old as photography, but if it were oftener heeded, we wouldn't be compelled to view so many fierce combinations of soot and white wash submitted by aspiring amateurs, and the army of good photographers would rapidly increase.

The amateur makes for himself a lot of unnecessary trouble instead of adopting the simplest methods to secure results he takes up the most complex. He builds an elaborate dark room, loads up with bottles of restrainer, accelerator and Heaven knows what, stews up in his gray matter all the information good, bad and indifferent that he can obtain, and then starts in to develop, fully believing that he must try and work in all his accumulated knowledge (?) with every tray full of developer. How much simpler for either plates or film is the tank method, no fussing with chemicals in the stuffy dark room in the attempt to secure results at variance with the exposure, but the simple art of placing your exposed plates in a tank of weak developer and leaving them there for a pre-determined

length of time. This method affords better results, avoids danger from light, fog or scratches, and materially lessens the time spent in the dark room. Here is a good place to begin to simplify. If some one tells you that A's developer is better for B's paper than the developer B makes for his paper, don't you believe him. Stick to B for B. If you fail to secure good results write the manufacturer. He will be more than pleased to set you right, and in the simplest possible way. Don't attempt too much. Learn each step thoroughly, and avoid all complex propositions. Simplify-Simplify-Simplify! !



Roland Rood in the June number of the *American Amateur Photographer* offers some really good advice relative to portraiture in his article "The Fallacy of the Dark Toned Portrait." He says in part:

"Select two models—women preferred, with clear complexions—and place them in a room lighted by one window, so that one is in the back and darker part of the room and the other in the lighter part; then stand near the window, facing them, and note the difference in color and values between the flesh-tones. The one in shadow will be darker and greyer, and the red on the cheeks will have considerably disappeared. The one in the light will appear brilliant, in a clear, silvery-golden tone as it were, with the reds pronounced. Look from one to the other as long as you like and you will always find these differences, or perhaps, if you have a delicate eye for color,

you may be able to observe what seems to be a certain strange greenish tone enveloping the model in the shadow; but whatever you do or don't see, the model in the dark will never look dirty—unless she really is; she will always look as if she were in a shadow. Now remove the model nearest you and gaze at the other. What happens? The veil of shadow begins to melt and disappear, until at last she becomes almost as vivid and beautiful in color as was the first. Why is this? Simply because when the two were there you adjusted the pupil of your eye to accommodate itself to the strongest light (the pupil, you presumably know, always, unless forced to do otherwise, tries to adjust itself to the strongest light, and this to protect the retina

from damage); but when the first was out of your field of vision your pupil dilated until it admitted into the eye sufficient light to again make things appear normal."



It has again been necessary to postpone the awards for the competition scheduled for July. A great many entries were received but the judges were not able to find among them five prints of sufficient merit to win the prizes. While this is most discouraging to us we hope that you will come out stronger for August and make the combined contest of unusual excellence and interest.



DRIFTING

By Dr. Albert R. Benedict

SPRING CLEANING THE DARK ROOM

MR. JOHNSON BARKER begins thus in a recent number of *Focus*:
The mere man regards the annual spring clean as an irritating work of supererogation, or else as an open confession that during the year the housewife has neglected her duties. The necessity for cleaning, he argues, implies the existence of dirt, and dirt ought not to exist in any house which receives decent and regular treatment with duster, scrubbing-brush and broom. Of course, notwithstanding, he allows the clean to proceed. He has no wish to make his womenfolk miserable by depriving them of what all the world recognizes as their legitimate enjoyment. The mere man, therefore, submits and suffers, whilst the average woman turns the home topsy-turvy and has a picnic in a different room every day for a week. That's where the mere man and the average woman differ.

IN PARTICULAR.

Despite her cleansing zeal, however, the average woman will certainly overlook the dark-room of the mere man, who is also a photographic man, unless she herself happens to be photographic, too. Yet of all places in the house—or out of it—be this dark place large or small, there is no place which needs periodic cleansing more and the cleansing must be systematic and thorough.

THE REASON AND NECESSITY.

The need of it is not only to clear out waste wrapper paper, empty and broken plate boxes, accumulated dust, old and disused bottles. These things matter little, except that they are untidy. What does matter, and is essentially important is to rid the place of chemical contaminations which arise from spilt developers, drippings from the hypo tank and other

sloppy messes. These messings dry on shelf and floor, are abraded and pulverize. They often furnish an adequate explanation why our best efforts turn out "ring-streaked and speckled." The fine particles of chemical dust disturbed by our movements float in the air to settle again on sensitive surfaces. Our dishes and measures and bottles all need attention, for they share the infection and contagion. In a word, one secret of successful photography is absolute cleanliness of apparatus and manipulation. The dark-room therefore *must* be cleaned, and in the long run the trouble of a complete turn out will be amply repaid.

SHELVES, FLOOR AND SINK.

First turn out the contents of the room and let them see the light of day, for at this time we should take stock of our possessions. Then begin with the walls. Wipe them down with a duster just damp. What spiders find to eat in a dark-room is hard to say, but in mine they weave in corners and seem to thrive. Their dwellings must be destroyed and they rooted out utterly. Next scrub the shelves. Lastly, use the scrubbing brush on the floor, and let the sink, if there be one, also receive its scrubbing. All this can be done by the household staff. It will probably be better done by them than the photographer himself. They have had previous training and experience in the house, whereas the photographer is but a prentice hand at such ablutions.

MEASURES, DISHES AND DETERGENTS.

The photographer's part lies with his stock. Let him examine his dishes and measures. He will find them stained and marked. Water alone is of no avail. Moreover, we must not trust to appearances. The enemy of chemical contamination often masks its presence under the guise of cleanliness, and we shall be mis-

led unless it is thoroughly understood that a vessel may look clean and yet chemically not be so. Chemical cleansing can only be secured by chemical means. Hydro-chloric acid (the commercial sort is good enough) in solution of one ounce to ten of water may be used as a detergent, or a mixture of one ounce of sulphuric acid, one ounce of bichromate of potash in twenty of water. Be most careful not to get this corrosive mixture on either skin or clothing, for it will leave a memento of its visit. It may be swabbed round and into corners with a tuft of cotton-wool on a stirring rod or skewer, and used repeatedly till its virtue has departed. After the vessel is thus treated, it should be thoroughly well rinsed out three or four times, and set aside to drain. In making the mixture the acid should be added last and poured in slowly in a dribble, with continual stirring.

BOTTLES.

Useful bottles it is desired to keep must be treated in the same manner as dishes and measures. Bottles, too, need further special investigation. Stale solutions should be thrown away. It is delusive economy to preserve them. Some bottles will have lost their labels, and their contents are open to doubt. There must be no doubt as to the nature of a chemical, and unless a name can certainly be given, it must be sacrificed along with the stale solution. Labels should be re-written and affixed where they are in a state of disrepair. Tidiness and cleanliness go together. Nothing helps good work more than order, even in small things. Labels can be bought at the dealers' specially printed and prepared. They are to be recom-

mended as an aid to neatness, and will outlast many a label written with the pen on gummed paper.

LAMP AND WINDOW.

Last of all, give heed to the lamp and window. Test the light to see if it be safe. The colour of a fabric, of paper, of stained films, even of glass, is apt to prove itself fugitive under the continuous action of light. The safe-light filter is not of necessity safe this year because it was so last year. The way to test the light is to take an unexposed plate of the brand usually employed, place it in the position you hold it when developing, put a penny on it, or otherwise shield a portion from the light, which should be in full play. Leave it thus exposed for five minutes or so, and then develop. If there is more than barely perceptible fog, shown by making the outline of the penny visible, the light is at fault. Whatever medium is employed, it must be replaced, or the intensity of the light behind it sensibly diminished. Many a plate has been spoilt by defective dark-room illumination. It is essential for lamp and window to be periodically tested, and the test may well form the final act of our dark-room spring clean.

CONCLUSION.

With the room now in order, measures and dishes free from traces of last year's work, bottles clean, freshly filled and named, it remains only to take advantage of those glorious days of spring which fill the universe with joy, and expose fresh plates to catch some picture of the beautiful world we live in, and then, in the recesses of the dark-room, to conjure with our stock that the charms we have captured may be made visible.

MONTHLY FOREIGN DIGEST

TRANSLATED BY HENRY F. RAESS

A New Silver P.O.P. Containing no Soluble Silver Salts

All silver P.O.P. contain soluble silver salts, usually the nitrate. This has been found necessary as otherwise sufficient strength of the image cannot be obtained. But the trouble is that silver salts are strong oxidizers, this is why papers of this class do not keep well. In spite of the progress in the manufacture of photographic raw stock, it is still impossible to avoid getting minute metallic particles into the paper. These cause the familiar black spots in the finished sensitized paper. Negatives also are occasionally stained, the paper darkening and sometimes becoming brittle, this is all due to the soluble silver salts. It is of great interest that these objectionable properties of silver P.O.P. have been overcome. Emulsions of silver chloride containing phenols blacken strongly in the light. The number of OH groups present is of considerable importance. With an increase of OH groups there is also an increased activity, Rosorcin giving the best results. Besides the organic bodies, certain mineral salts consisting of elements capable of forming two classes of oxides (higher and lower) give very good results. Equally good results are obtained whether the emulsion has been washed or not. Gelatine, collodion, albumen, caseine, etc., can be used as the binding material. Trials have shown that these new emulsions give results equal to the best P.O.P. prepared in the usual manner, but without their disadvantages. By A. and L. Lumière.—*Apollo*, No. 252, Dec., '05.

Fine Grained Focusing Screens

Fine grained focussing screens are easily made as follows: An unexposed plate (an old or fogged plate can be used) is evenly exposed to some weak light, as candle light, for a few seconds. The plate is then placed in any suitable developer until the film becomes a dark gray, it is then fixed and washed. After washing the plate is placed in mercuric chloride until white, again washed and dried. It is then ready for use.—*Apollo*, Vol. 11, No. 251, Dec., '05.

Hardening Film During Development

The Actien-Gesellschaft für Anilin-Fabrikation of Berlin, better known as the "Agfa" have patented a process for hardening the film of plates and papers during development by adding a chrome salt to the developer. Only those developers which develop with alkaline sulphites can be used, such as diamidophenol and diamidorescorcinol. The developer has the following composition:

English.	Metric.
10-13 1/3 ozs.. Water	300-400 C. C.
30 grains. Diamido phenol	2.0
45 grains. Chromic chloride	3.0
90 grains. Sodium sulphite, anliyd	6.0

Time of development about six minutes, fix as usual. The wash water may be heated to 80-90 deg. C. (176-194 deg. F.) The washing need only be for ten minutes at this temperature. The drying may take place at a similar high degree of heat.—*Die Photographische Industrie*, Vol. 52, Dec., '05.

Note.—The original article does not state how it is proposed to dissolve the chromic chloride since the latter is insoluble even in boiling water, possibly the presence of the developing agent renders it soluble.

Boric Acid in Fixing Bath

The relative value of boric acid compared with other acids for acidifying the fixing bath has been the subject of experiment by H. Reeb, *Photo-Revue*, Mar. 4, '06. He found that commercial sodium thiosulphate, $\text{Na}_2\text{S}_2\text{O}_3$, varied in its properties, some samples would become cloudy on the addition of boric acid before others, the appearance and physical qualities are no guide in regard to this. Solutions of sodium thiosulphate containing from 10-80 per cent. of the salt were made and boric acid, from 2-8 per cent. were added to all solutions. The solutions were heated to boiling and allowed to stand one day. It was found that the solutions remained clear if the amount of boric acid did not exceed 6 per cent., above this the solutions became cloudy and evolved sulphur dioxide SO_2 . This fixing bath is acid in character, but salts having an acid reaction like alum must not be added as it decomposes. In conclusion, boric acid possesses no advantages over other acids usually employed in fixing baths, and as 6 per cent. is approached it becomes very unstable. Balaguy found that the usual fixing baths had the tendency to attack the skin of his fingers, giving him a sort of eczema which disappeared on using the boric acid to fixing bath.—*Photographisches Wochenblatt*. Vol. 32, No. 14, '06.

Photo Varnishes Containing Carbon Tetrachloride

E. Valenta attempted to use carbon tetrachloride in place of the usual solvents for dissolving various resins for making varnishes used in photography. He met with considerable success. Carbon tetrachloride CCl_4 is a colorless heavy liquid with a pleasant odor, resembling chloroform, boiling point 76

deg. C (167 deg. F.) Sp. Gr. 1.63 Fowne's chemistry Sp. Gr. 1.56) mixes with alcohol and ether, not soluble in water, dissolves fats and resins quite easily. The cost of manufacture of CCl_4 has been reduced so much within recent years that its price no longer debars it from being used for the purpose herein set forth.

DAMAR VARNISH.

English.	Metric.
75-150 grains ... Damar....	5-10.0
$3\frac{1}{8}$ ozs.	C Cl. 4 100 c. c.

This forms a colorless solution which should be filtered. The resulting varnish is suitable for negatives, either dry or wet (collodion) plates.

MASTIC VARNISH,

English.	Metric.
75 grains.....	Mastic..... 5.0
$2\frac{2}{3}$ ozs.	C Cl. 4 80 c. c.

It may be necessary to warm the CCl_4 as mastic is not so readily soluble as damar. This solution should also be filtered. Both varnishes when fully dry yield surfaces which can be used for re-touching. Shellac could not be used as it is not sufficiently soluble.—*Photographische Korrespondenz*, April, 1906.

Developer Giving a Fine Grain

It is often desirable to have the grain in a negative (or positive) finer than that usually obtained, especially if the picture is to be considerably enlarged. Lunière and Seyewetz found in their experiments with developers that paraphenylene-diamine gave the finest grain. It works free from fog. The positives (slides) have a fine violet brown color.

English.	Metric.
32 ozs ..	Water..... 1000 c. c.
$\frac{1}{8}$ oz ..	Para.phenylene-diamine 10.0
2 ozs.	Sodium sulphite, anhyd 60.0

—*Photographische Rundschau*, Vol. 19, No. 1, '05.

A PHOTOGRAPHIC VERMIFORM APPENDIX

BY MILTON B. PUNNETT.

THE veriform appendix of a human being is according to a physiological theory, the remains of an organ which at some very early period in the development of the human race, served a particular purpose. During the course of evolution the conditions which were the cause of the growth of the organ having changed or disappeared, the organ itself for the lack of use gradually grew less and less until only a receptacle for grape seeds, cherry stones and the like, remains to create diseases for fashionable folks.

Not only are there Vermiform Appendices which afflict us physically, but there are also ones which afflict us socially, morally and, to the point, photographically. A Vermiform Appendix which afflicts the art of photography at present is the idea that to obtain good results, each individual negative should have special treatment in development and that there are no general laws governing development which if thoroughly understood and applied will admit of developing en masse.

This is an appendix, which, as any amateur or professional can prove to his or her own satisfaction as the writer has to his, is filled with seeds of ignorance and stumbling stones of error. As far as film is concerned to prove this statement is very simple. Expose two rolls of film as nearly alike as possible. Under, over, and correct exposures can be given but for every exposure on one film there should be a corresponding similar exposure on the same subject under the same conditions made on the other. Develop one in a Kodak developing tank or machine following directions careful-

ly. Develop the exposures of the other roll separately; starting development with a normal developer and giving to the individual exposures such treatment as the appearance of the image would in your judgment indicate. For instance, for over exposure use plenty of bromide or more of the developing agent or less of the accelerators and for under exposures more water or more accelerator or less developing agent or any combination you may think advisable. In other words perform your own operation for photographic appendicitis and I will guarantee a cure as far as the above cause is concerned.

Mentioning bromide recalls to my mind how I chuckled to myself at the absurdity of Watkin's statement that it was useless to add Potassium Bromide to the developer after the image had appeared. Hadn't I developed many a plate and when I saw that it was over exposed added bromide and obtained a good negative when otherwise it would have been an absolute failure. I knew I was right, yet in order to convince others it was necessary to make comparative experiments and so I did; result—lost—one photographic appendix.

The above experiments were made with plates. Lately I repeated them with films developing one set in tank and one set by the Rip Van Winkle method of using bromide, examining image on surface and back, looking through it, etc., and now not even the scar of the previous operation is left. And it is as it should be, for the Kodak Tank and the material and instructions which accompany it are the condensed results of thousands of experiments each experiment seeking to eliminate the false and retain the true. Mr. Child Bayley editor of "*Photography*"

and one of England's leading men in the science of Photography, gets at the meat of the matter when he states "*the system is at once scientifically sound and practically perfect*" and "We are not interested in the Kodak Products any more than in any of the other excellent manufactures which go to make the amateur photographer's path an easy and a pleasant one. But we are interested in everything which will help our readers to get *better results or a higher percentage of good results*, than they have been doing. Every spool of film we expose (except that which has been exposed for the express purpose of trying other developers or methods) is developed in a Kodak Apparatus and up to the present we have not lost a negative any defect in which we could fairly attribute either to the machine or the system." I may appear unduly enthusiastic on this subject but as a lover of photography and one who has developed hundreds, yes, thousands of

plates under the old system, I may be excused the enthusiasm of a convert who finds that he has an annoying appendix which he can so easily shed.

Mr. John Boyd in the June PHOTOGRAPHIC TIMES in a well written article occupies six columns showing how films should be developed. To Mr. Boyd I would extend the right hand of fellowship and the sincere advice to use a tank, make comparative experiments and then stand up and in his facile style announce his conversion.

While the mood is on me let me make a statement and on it base a prophecy: By using the tank developing system for films more and better negatives can be obtained than by individual treatment. Within a few years the stand development system will be almost universally used on plates and films.

"Try all things—hold fast to those that are good."

Note.—The italics in the quotation, from Mr. Bayley, are mine.



"C" IS FOR CUTE

By Lawrence C. Randall

NOTES, NEWS AND EXTRACTS

The Royal Photographic Society of Great Britain is desirous of making its fifty-first annual exhibition which will be held in New Gallery, 121, Regent street, London, West, England from September 20th to October 27th, 1906, truly international in character. To that end we urge all American photographers who are able to do good work to enter pictures for competition. We will be pleased to furnish full descriptive circulars on request, or they may be obtained by application to J. McIntosh, Secretary the Royal Photographic Society of Great Britain, 66 Russell Square, London, W. C. England.

Conventions and the Good they Do.—

Particularly the P. A. of A.. I am a great believer in conventions and the benefits derived therefrom. I look forward with a great deal of pleasure to the annual meeting of the National Association, with its greeting of old friends and that happy reunion after a year of separation, and those pleasant little heart to heart talks which make us thaw out and talk shop as we never did before. You exchange confidences with the other fellow (if you are not a Clam) and tell him how you did this or how you secured effect. If he has something new up his sleeve he will put you wise to it if you only meet him half way.

One of the greatest attractions to me at a convention are the pictures. I think this one feature well worth the expense of attending. At the National Convention you have a representative collection of the best work of the country. You can see how your work compares with that of the man of the North, East, South, and West; why his work excels, and if you are not too narrow you will go home profited by the comparison. The National Exhibit is an inspiration to me and I go home and try hard to improve my work for the next year. You can not do this by leaving your work at home; you must send it to the convention, you can not make the comparison with it on your walls at home. This comparison will surprise you at your own weakness and takes some of the conceit out of us. This is where the convention does some of its good.

A great deal of profit will be derived from attending the business meetings. Don't leave it for the other fellow to attend to, then when you get home and read the report in the magazines, criticise the convention because they did not do things according to your way of thinking. Come, attend the business meetings listen to the lectures, hear the criticisms, and take part in the discussion on business topics. You will get out of the convention just what you dig out of it yourself.

At the National there will be no prizes this year, but a greater honor. All pictures sent, except those marked "Complimentary" will be passed upon by a competent jury who will select twenty-five of the best pictures, taking only one from any exhibit which will form a Salon. Each picture thus selected will be marked with a blue ribbon and either allowed to remain with the rest of that exhibit, or they will all be exhibited collectively on a separate screen. All "Complimentary" work will be plainly designated as such so that all may know that in selecting the Salon the "Complimentary" work was not passed upon by the jury. The Salon Pictures are designed for publication in the Association Annual for 1907 with the consent of the Convention at Niagara Falls.

Certificates of Salon Honors will be awarded, and plans are being perfected for further recognition of these pictures as embodying the standing of Professional Photographic Art for this year.

Join with us at Niagara Falls, August 7th, 8th, 9th, 10th, the profit will be yours.

Fraternally yours,

C. J. VAN DEVENTER, 1st V. P.
Decatur, Ill.

It often happens when standing before a picture which appears to be well drawn and pleasantly coloured, that we are conscious of something wanting. There seems to be no true center, no rest for the eye, which loses itself in a maze of detail but gives no sense of unity or coherence.

Many pictures lack this consistent disposition of their component parts, with the result that we have, as it were, on our canvas several pictures, but no picture. The painter has

thought more of each part, the *morceau*, than of the whole effect.

In well-composed pictures every detail is arranged with a view to the whole, every figure, every attitude duly considered, and often the most apparently natural composition is the result of infinite study and reflection. By way of testing the composition, take away or transpose a single figure and the effect will often be irretrievably marred; add another and the result may be to spoil the whole balance of the picture.—*How to look at Pictures* by Robert Clermont Witt.

At the Annual Meeting of the Chicago Camera Club of June 7, 1906, the following officers and directors were elected to serve for the ensuing year:

President.—F. M. Tuckerman.

Vice-President.—Dr. A. Schalek.

Treasurer.—W. H. Edwards.

Secretary.—W. F. Gingrich.

Directors.—E. W. Thomas, D. H. Brookins, A. L. Fitch.

Lantern Slide Director.—E. W. Thomas

A fine portrait camera has been added to the equipment of the Club, and with the fine light obtained by enlarging of the room, will be of great value to the members.

Drying Yunox prints flat. Yunox prints may be dried flat either by laying out the damp prints face down on cheese cloth stretchers or by drying between blotters. In either case the prints should be well hardened by fixing in the bath prepared with Yunit Acid Hardener and leaving all the prints in the fixing bath for 15 minutes after the last has been immersed. After washing, make a pile of the prints on a glass plate and squeeze out all surplus water. If blotters are used, be sure they are perfectly dry when the damp prints are placed between. Yunox prints dried in this way will not adhere to the blotters or cheese cloth and when dry will lie perfectly flat.

Photographers Association of New England Convention will be held August 21, 22 and 23 at Mechanics Building, Boston, Mass.

GRAND PORTRAIT CLASS.

Open to the world. Three portraits from 8x10 negatives, or larger. One gold medal. No entry fee charged.

Class "A."—Open to New England States and Maritime Provinces.

Three portraits, no restriction to size.

The ten exhibits receiving highest votes will be awarded Silver Medals, next twenty-five Bronze Medals.

Class "B."—Open to New England States and Maritime Provinces.

Three landscapes. No restriction to size. The two exhibits receiving highest votes will be awarded Silver Medals, next three Bronze Medals.

Three pictures must be sent to be entered in any class; over that number will be hung at the discretion of the hanging committee.

RULES AND REGULATIONS.

1. All exhibits must be in the hands of the committee of hanging, on or before August 18, 1906.

2. Pictures entered in the competition for prizes will be awarded by popular vote.

3. Pictures may be framed or unframed at the discretion of the exhibitor, but those entered in the competition for prizes must be without glass.

4. All exhibits entered for competition will be so marked by the exhibitor.

5. No exhibitor's name will appear on any picture; each exhibit will be numbered. Names will appear after the awards have been made.

6. Space will be reserved for complimentary exhibits, and all photographers who do not wish their work in the competition will have space reserved in this class.

7. The Association will not be responsible for any loss or damage to pictures in its charge, but special precaution will be taken by the committee to ensure the safe return of all exhibits intrusted to its care.

8. Art exhibits must be sent prepaid to the P. A. of N. E., Mechanics Building, Boston, Mass.

9. Screw box covers instead of mailing them, with the exhibitor's name with home address on the under side of the cover to insure the return of the exhibit.

A useful box in the dark room—All amateurs experience at some time or other the awkwardness of the dark-room lamp going out, or being turned out accidentally. When this happens while one is developing, loading slides, or using bromide paper, it is, of course, necessary to cover up the sensitive plates, etc., before a new light can be introduced, and if matches happen to be outside, it means also opening the dark-room door to fetch them. One of the most useful things to have in a dark-room (writes "Esp," in the *Bazaar*), to be

ready for this emergency, is an empty light-tight box, into which the plates, etc., can be slipped, or into which the developing dish can be put, if the contingency happens when one has a plate in the developer. Such a receptacle may easily be prepared thus: Obtain a neat box, with close-fitting lid (a suitable one may be obtained from the grocer's or confectioner's), line it with black paper, and also glue a margin of black paper or old velvet round the outside edge, to cover the edge of the lid when it is closed, and so to prevent light from entering through any chink. This handy box, kept ready on the dark-room shelf, may be utilized in a moment, in the event of any such emergency as named above, and uncovered papers or plates, or even the developing-dish, may be enclosed in the box until fresh light is procured in the lamp, and the room is made light-tight again for the proceedings to be continued.

To make a sharp background fuzzy—

Very often a good portrait is spoilt by the background showing up too clear and sharp, and the effect can be considerably improved by throwing it out of focus and keeping the figure sharp. This is best accomplished in the following manner:—Hold the negative up to the light, or place in a retouching desk, and trace the outline of the figure on a piece of paper, and then paste the paper on a thick piece of blotting paper or thin felt. The paper or felt is now trimmed to the traced outline with a sharp knife. At the corners and around the edges of the negative paste narrow strips of cardboard. Fasten the paper the print is to be made on to the cardboard so as to strain it. The negative is placed in the frame, the cut-out form placed over the figure on the paper and the frame is closed. The pad presses the paper upon the figure, which is sharply printed, while the cardboard keeps the rest of the paper away from the negative, giving diffused printing and an even background. The amount of diffusion is governed by the thickness of the pad.

Scratched negatives—*Photography* gives the following useful method for dealing with this accident:—"So long as contact printing is

being done, scratches on the glass side of a negative do not matter, as there is no fear that they will show in the print, provided the light in which the printing is done is diffused. When a lantern slide or a transparency is being made in the camera, however, the case is different, and if the best possible definition is required, there is great risk of the scratches showing also. In such a case, the remedy usually given is to fill the scratch up with Canada balsam. Unfortunately, this is easier said than done, and, as a rule, the final stage of the negative on which this is tried is worse than the first. If Canada balsam is to be used, it is best to apply it all over, and cement down an unscratched plate onto the glass. But this is using a sledge hammer to crack a nut, and an equally effective result can be obtained by placing a clean, unscratched glass on the other, with a few drops of glycerine between them, and temporarily attaching the two with stamp edging. The scratches disappear, and after the work is done the plates may be separated, the glycerine washed off by immersing the whole negative in water, and standing it up to dry again. Too much glycerine must not be used, of course, or it will make a mess, and it is best applied by hinging the two plates together along one edge with stamp paper, putting a little glycerine near that edge, and then slowly bringing down one plate on the other, so as to drive any air out before the glycerine, and so avoid bubbles."

To prevent postcards curling—The following is a very simple and effective method of drying sensitized picture postcards, whereby they will be perfectly free from any tendency to curl. Spread a towel or piece of cloth upon a table, place the postcards upon it with their picture side up. Take the first card and insert a push-pin close to one end of it, then push it against the pin so as to form an arch, and insert another pin to keep it in that position. Now take another card and place it at the end of the first card in the same manner, then a third card, and so on until the whole batch are arranged thus: (~ ~ ~) Allow the cards to remain in that position until thoroughly dry, and when released from the pins they will lay perfectly flat.



BOOK REVIEWS

How to Look at Pictures by Robert Clermont Witt. Published by G. P. Putnam's Sons, New York. Price \$1.40 net.

While this book has been written primarily for the study of paintings, there will be found much of interest and value to the aspiring photographer seeking to improve the artistic quality of his work. In the chapters on The Portrait, Landscapes and Genre are many useful passages lucidly explaining the fundamental principles underlying the three classes of subjects usually attempted by the camerist. A careful reading of the chapters devoted to drawing and composition would prove most helpful to struggling amateurs who now wonder why prints technically excellent are often rejected by reason of their ignorance of these essentials for artistic photography.

Magnesium Light Photography by F. J. Mortimer, editor of the *Photographic News*, Published by Dawbarn & Ward, 6 Farringdon Avenue, London, E. C. England. Price 50 cents, Tennant & Ward, American Agents, 287 Fourth Avenue, New York City. This is one of the most interesting and practical books in flashlight photography that has come within our notice. The chapters in flashlight portraiture are particularly instructive as they are illustrated with the portrait and the interior arrangement of the room at the time the exposure was made. The only thing we don't like about the book, is the fact that it gives a number of formulae for flash compounds. Don't try to compound flash powders. Life is too short to trifle with fate.

Die Photographische Kunst in Jahre 1905 by F. Matthies-Masuren, 4th edition. Published by Wilhelm Knapp. Halle a. S. Germany. Price Mk. 8.0. This book contains a fine collection of reproductions of the present standard of photographic art. It forms practically an international review since not only Germany, but several other countries contributed, notably France, Great Britain, Austria and the United States. Among the well-known Americans are Käsebier, White, Bell, Steichen and Stieglitz. There is also a short history of the Rise of Photographic

Art in America. This volume is a notable addition to the literature of photography from the German standpoint.

Practical Notes in Photography by Elbert C. Smith reviewed in our April issue costs twenty-five cents instead of ten cents as incorrectly printed.

"Geschichte der Photographie" by Dr. Josef Maria Eder, 3rd edition, 1905. One hundred and forty-eight illustrations and 12 tables, published by Wilhelm Knapp, Halle, a. S. Germany, Price M. 12.0.

Eder's new book is divided into 48 chapters each chapter treating of a particular process. The first 15 chapters refer to the work done before Dauguerre's time, and the latter ones are not only on pure photography, but also on the near related photo-mechanical and three color work, being brought up to date. The book shows painstaking investigation, and contains many valuable references.

The Photographic Picture Post Card for Personal use and Profit by E. J. Wall and H. Snowden Ward. 104 pages, listed at 50 cents. Tennant and Ward, Publishers, New York.

The picture postcard craze has brought with it a demand, from amateurs and professionals, for a textbook which will tell how these cards can be made from one's own negatives. In this manual, Messrs. Wall & Ward give all the known methods for home-made postcards by gelatino-chloride, collodio-chloride, gelatino-bromide, plain silver, silver iron and kallotype processes. Chapters are also given to the manipulation of commercial bromide and gaslight postcards, P.O.P., platinotype, etc., and collotype cards. A separate section deals with the making of money from postcards, choice of subjects, how to publish, how to sell and how to collect. A very satisfactory hand book with formulae and methods for practical work.

Deutscher Photographen Kalendar, 1906, Part II. by K. Schwier. Published by *Deutschen Photographen-Zeitung*, Weimar, Germany, Price Mk. 2. 0.

This second volume while of little interest to the amateur or professional photographer, is valuable to the manufacturer and dealer as it contains a list of all the photographic clubs, amateur and professional, in the world. The names and addresses of members of German and Austrian Clubs, the same for European manufacturers of photographic material and allied arts and crafts.

Photographic Enamels, from the French of Rene D'Hellicourt. 96 pages. Cloth, price, \$1.25. Tennant & Ward, Publishers, New York.

The need of a practical hand book to the making of photographic enamels ensures a ready welcome for this little book, which is translated from the French work, now in its second edition. The methods given are the result of actual experience and are accompanied with abundant formulæ to ensure successful results. Among the processes dealt with, are the powder process with a chromate salt; the powder process on porcelain; the powder process with salts of iron; the photo-ceramics paper method in which vitrifiable carbon tissues are used for transfer to porcelain or glass; the substitution process; firing; the furnaces used; and retouching the enamels.

Precis de photographie general Vol. II. 1905. Ninety-nine illustrations, 10 plates. By

Edouard Belin. Published by Gauthier-Villars, Paris, France. Price fr. 7. 0.

This book forms the second volume of a work which is intended for scientific and industrial applications of photography. It treats of color photography, collodion process, photo-mechanical printing, automatic printing methods, photography with artificial light, stereo, metro, chrono, micro, spectro, astro and astino-metric photography, the manufacture of dry plates and photographic papers and the treatment of residues.

Der Lichtdruck Second edition, revised, 1906, 71 illustrations, 8 plates by August Albert. Published by Wilhelm Knapp, Halle, a. S., Germany. Price Mk. 7. 0.

We have been familiar for some years with three color prints made by a photo-mechanical process to be used in the printing press, this process necessitated the use of the half tone screen. This screen marred the beauty of the pictures considerably. But it did not seem possible to evolve a process which would permit the printing of three color pictures without the use of a screen. Prof's. Albert and Brandlmayer of the government engraving institution at Vienna, (Austria), succeeded in inventing a comparatively simple process which does away with the objectionable screen. The latter and several other processes are set forth in the above book.



TRADE NOTES

Schering's Pyrogaeic Acid advertisement in our June number may prove somewhat misleading to the many users of this valuable product. There has been no change made in the style of package. The seals and labels are as heretofore in red and black as in the corrected fac-simile advertisement appearing in this number. By the way if you have not yet tried this standard brand, step in at your dealers and get a package. It will surely give you satisfaction.

The Yunit Chemical Co., of Rochester, N. Y., have printed up a small sheet of special instructions for the drying of Yunox prints, when it is desired to have them perfectly flat when dry.

Anyone who is interested can secure a copy for the asking.

Miles Greenwood, 84 Cottage Street Melrose, Mass., takes special pride in turning out work for particular amateurs. Write him for prices. You might also send him a quarter for samples of English papers and films if interested in foreign brands. His advertisement gives particulars.

The New York Camera Exchange have a new bargain list No. 14 which surpasses the No. 12 advertised in our June issue. Be sure to write to them, (114 Fulton street, New York), for a copy before laying in your stock of vacation supplies. It will interest you.

New York City is to have a photographic School at last. The Milton Waide Metropolitan School of Photography Inc., 32 Union Square, New York City, have planned a most complete course of instruction both by correspondence and personal direction. All phases of the subject will be treated. The professional, amateur, or beginner, who desires knowledge concerning any process or product, will receive prompt and thorough attention. The school will furnish either complete courses or specialize in posing, lighting, developing, printing, mounting, composition, etc. For a small fee, they will help you out on all your little photographic worries. The location of the school is convenient, the facilities adequate and up-to-date, and the personnel

of the faculty excellent and competent. Not the least desirable feature to the student whose aim is commercial, is the statement that the school has arranged to place its graduates in good positions. A cordial invitation is extended to all interested parties to freely consult its bureau of information. A line to the Milton Waide School of Photography will bring full particulars of terms, courses, etc.

Trier & Bergfield, River Avenue and 151st street, New York City, send us a line of their new Cobweb and Art Club Card mounts. The prices should appeal to all professional photographers who are alive and desire to show their work attractively. A line to this most progressive concern will keep you posted on novelties in this direction. Photographers who attend the convention will find a full display at Booth No. 8.

The Tank as a Convenience The question of convenience in development is an important one to the amateur photographer. Even if you belong to a camera club with a well appointed dark room and have a similar convenience at home, there are many times when such places are not available and often such an instance occurs when you are most anxious to develop one or more rolls of film.

The usual make shift dark room is the acme of discomfort and tends not only to ruffle your temper but ruin your films as well and you often times defer development till you can make use of your usual convenience, or if going on a long trip almost persuaded to leave your Kodak at home.

In just such cases the value of automatic development becomes evident and when coupled with the advantage of performing the entire operation in daylight the possession of such a device for the purpose becomes almost imperative.

We all remember how sceptical we were regarding the developing machine and how soon its entire efficiency was demonstrated. Now the Eastman Kodak Company have still further simplified their daylight system by introducing the Kodak Tank Developer which performs the entire operation of development out in the ordinary light and without even the necessity of rotating the film during development.

THE PHOTOGRAPHIC TIMES

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Business Opportunities.

PHOTOS FROM LIFE

Model Studies, Stereos, Beauties, etc., 100 small photos and two large ones, \$1 note.

S. RECKNAGEL, Nachf.

MUNICH (Germany).

LIVING MODEL—Nude Photos, full length, 12x9 in. Sample 20c, value 50c. Excelsior Co., Carlisle, Pa.

EXCHANGE.—4x5 triple extension "Korona" 1901 pattern, for extension pocket plate camera or 5 in. anastigmat. Charles V. Weiler, Flemington, N. J.

FOR RENT—A new and modern photograph gallery in a new building in New Kensington, Pa., a hustling, growing city in center of 10,000 population. Practically no competition. An elegant opportunity to build up a thriving business. For particulars address H. J. Logan, New Kensington, Pa.

HAVE YOUR LOCAL VIEWS MADE INTO

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FROM 25c UP OF A SUBJECT

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PHOTOGRAPHIC MAGAZINE FOR SALE.—Photo Era, Vol. I to XVI inclusive; Camera Notes Vol. II to V; Wilson's Photo Magazine 1890 to 1903; Photo Times Bulletin 1886 to 1904; Anthony's Bulletin 1891 to 1901; International Annual Vol. I to XIV; etc. Complete volumes; perfect condition; cheap. George R. Seiffert, Lock Box 41, Phila., Pa.

FOR SALE.—3a Kodak anastigmat lens, Volute Shutter like new. By express C. O. D. and examination. Robert D. Hamilton, Canton, 224 South Wells Street, Ohio.

FOR SALE.—Fine large studio on Public Square in Chambersburg, Pa., 11,000 population, 10 miles rich surrounding country from which to draw. Death of owner cause of sale. Good trade, elegant rooms, good location.

Price \$500. Address, Samuel F. Huber, Chambersburg, Pa.

ELEGANT GROUND FLOOR STUDIO FOR SALE—My splendidly located ground floor studio, situated in the very choicest part of Cleveland's residence district, for sale. All conveniences, natural and artificial gas, electric light, steam heat. Chance of life-time for good workman. If interested send for photos of studio and full particulars. J. Erickson, 721 Hough Ave., Cleveland, Ohio.

Employment Wanted.

WANTED—Position by young man. Good all round workman. Address W. F. Jackson, Box 302, Effingham, Ill.

POSITION WANTED.—By a first-class all-round photographer. Sober and progressive. Operating and dark room work a specialty. Address Box 302, Effingham, Ill.

Wanted.

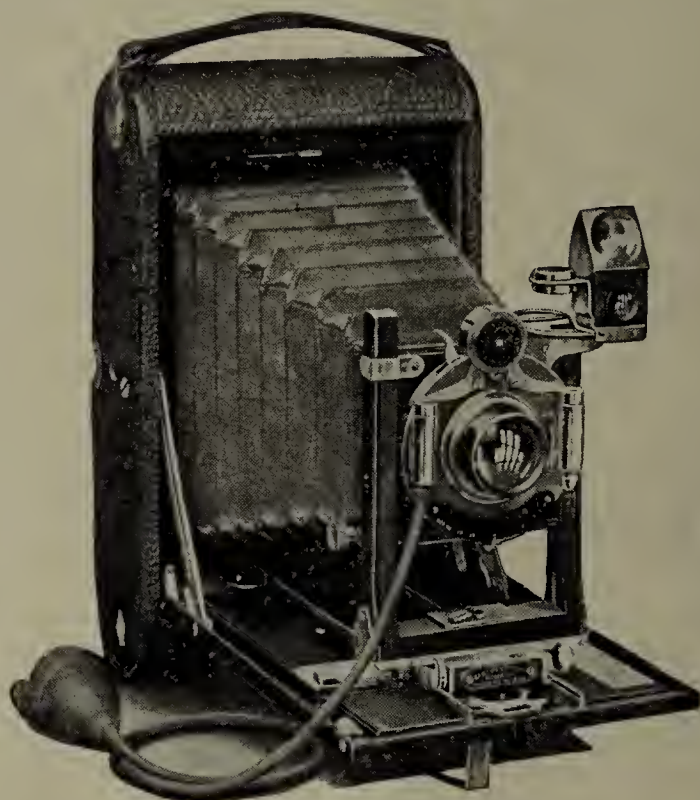
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An additional few inches of bellows on your Kodak would often times prove of great value permitting the photographing of the object at close range and on the largest possible scale ;

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There is a remedy, a way to get all the value of these additional inches without increasing the bellows length or bulk of your Kodak. Condensed inches would be a good name for this attachment ; it is simply a supplemental lens that slips on over the front of your regular lens. It is called the Kodak Portrait Attachment. While designed primarily to enable the Kodaker to produce large head and shoulder portraits it stands to reason that it will be equally valuable for photographing any small object at close range.

The Kodak Portrait Attachment will be found invaluable not only for portraiture but for the photographing of wild flowers and all natural history subjects too small to be photographed on a sufficiently large scale with the range of the ordinary instrument. The attachment is but little bulkier than the half dollar that will purchase it. Ask your dealer.

THE PASSING OF THE JUGGLER.

The ideal method of development is the one affording the highest percentage of good results with the least expenditure of effort.

The following extracts from an article by H. L. Fair in the *St. Louis and Canadian Photographer*, a professional journal, is a strong argument in favor of tank development :

" I believe I have good grounds for asserting that development by tank is the coming method and that the time will come when the most hardened juggler of plates and chemicals will realize that his " skill " is in vain, and that the automatic process is better, as far as results are concerned, as it is admittedly the easiest and quickest method now known."

" In the first place *it has been proved* that there is no possible way by which the gradations of a given exposure can be altered after the developer is once on and development started, except by the relative length of development."

" *The kind of negative is determined by exposure, the quality by the time and composition of development, and no altering of the developer alters the quality except as it alters the time.*"

" The tank will take care of any exposure correctly so it is within the limits of latitude of the plate."

" The tank can get detail out of a much shorter exposure than ordinary development can."

" If you are an honest sceptic, make an experiment or two—make the next lot of negatives in pairs, develop one set in the dark-room and tank-develop the other set. If you have honestly followed instructions there will be no question that the tank negatives are as good or better than the others,—"*they will be delicate beyond expression in the highlights, there will be no undue contrast and there will have been no long dark-room seance to get them.*"

Every day adds to the endorsements of tank development from both amateur and professional, if you are sceptical try the experiment, any Kodak dealer will willingly tank-develop a roll of film to prove the argument.

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IN THE FAST CLASS.

KODAK FILMS RATED BY AN EXPERT
WITH THE FASTEST PLATES MADE.

In the various editions of the *Photo Beacon Exposure Tables*, Eastman Film has been placed in the second column thus rating it at a lower speed than the Seed 27 plate.

This rating not being in accordance with our tests, we, to insure the proper rating in the new edition of the exposure tables being prepared, communicated with Mr. F. Dundas Todd, the publisher of the tables. He suggested, to definitely determine the matter, that a comparative test be made by Mr. R. Jas. Wallace, Photo Physicist at Yerkes Observatory, who possesses remarkably complete apparatus for testing the speed of photographic sensitive surfaces. We heard nothing further on the subject till we received the following from Mr. Todd.

"Mr. Wallace, of Yerkes Observatory, has just come into the office and handed me a very elaborate series of tables and a Hurter & Driffield curve concerning Seed Plate 27, emulsion No. 1029, and Eastman Film, emulsion No. 5205, both of which were bought here. The net result is that he finds the film to be the merest trifle slower than the plate, but the difference is so mighty little that they are the same. It is one on me and I accept the medicine."

Eastman Film is prepared to successfully take care of the harsh lightings and the multitude of unequal conditions constantly confronting the amateur, it is non-halation, orthochromatic to a high degree of sensitiveness, and possesses the speed of the fastest and highest grade portrait plate in the world. The twenty years of experience back of Eastman Film have not been spent in vain.

FILMS STAND

TROPICAL HEAT. IT ALL DEPENDS
ON PROPER PROTECTION AND
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There have been ample proofs in the past few years that there is no difficulty in keeping film under the most trying conditions if reasonable precautions are only taken.

First, the film must be put up in air tight receptacles. An individual tin can, sealed with tire tape, is the most practical, convenient and inexpensive method.

Second, *the film must be promptly developed after exposure.* The point is that when the film is opened up for exposure the gelatine rapidly absorbs dampness from the water-laden atmosphere of the tropics and deterioration begins in a very short time.

We have heard three times within a few weeks from Mr. Charles J. Glidden, who is touring the world in an automobile, and each time he has spoken enthusiastically of his success with film. The first postal was from India, the next from China, and the last, under date of April 24th, from Nagasaki, Japan, says :

"Film received at various stations in the Orient as ordered. All in good condition. Sea and heat (120 in sun) has not damaged a single film and all exposures excellent.

Very truly yours,
CHARLES J. GLIDDEN."

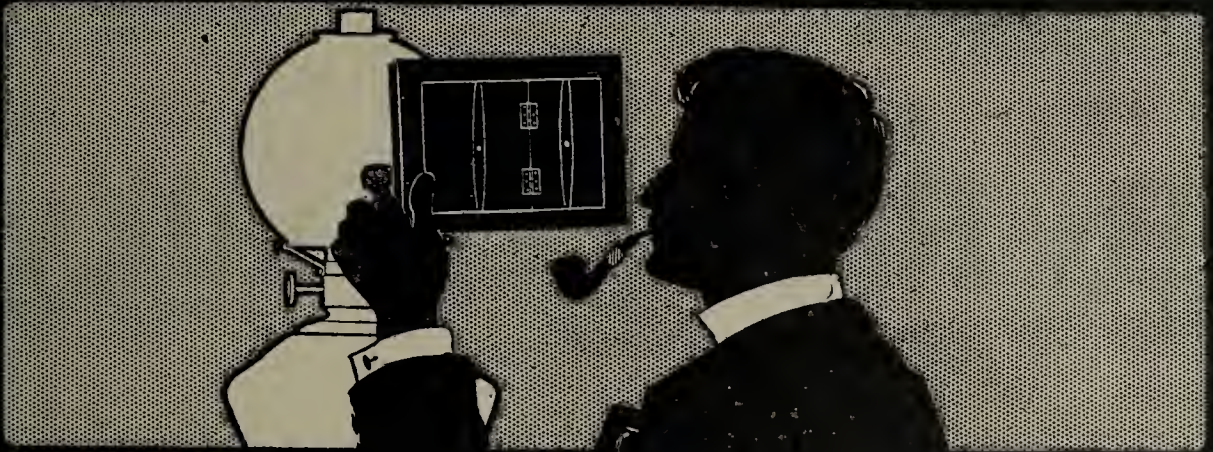
If you intend Kodaking in the tropics, see that your film is properly packed.

Kodak cartridges will be packed in sealed tubes on request at 5 cents each.

Take along a Kodak Tank Developer to insure the means for proper development. If necessary, sea water may be used for all processes of development provided only that the final rinsing is in clean fresh water.

(3)

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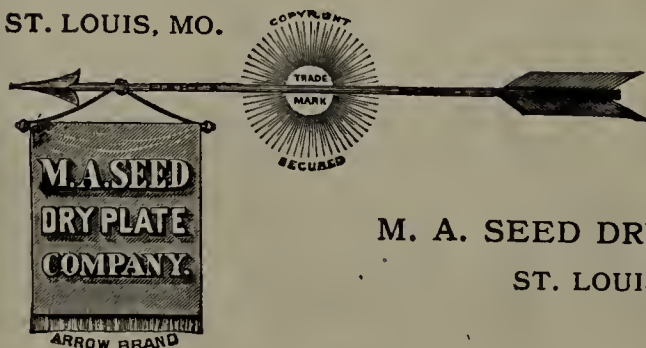
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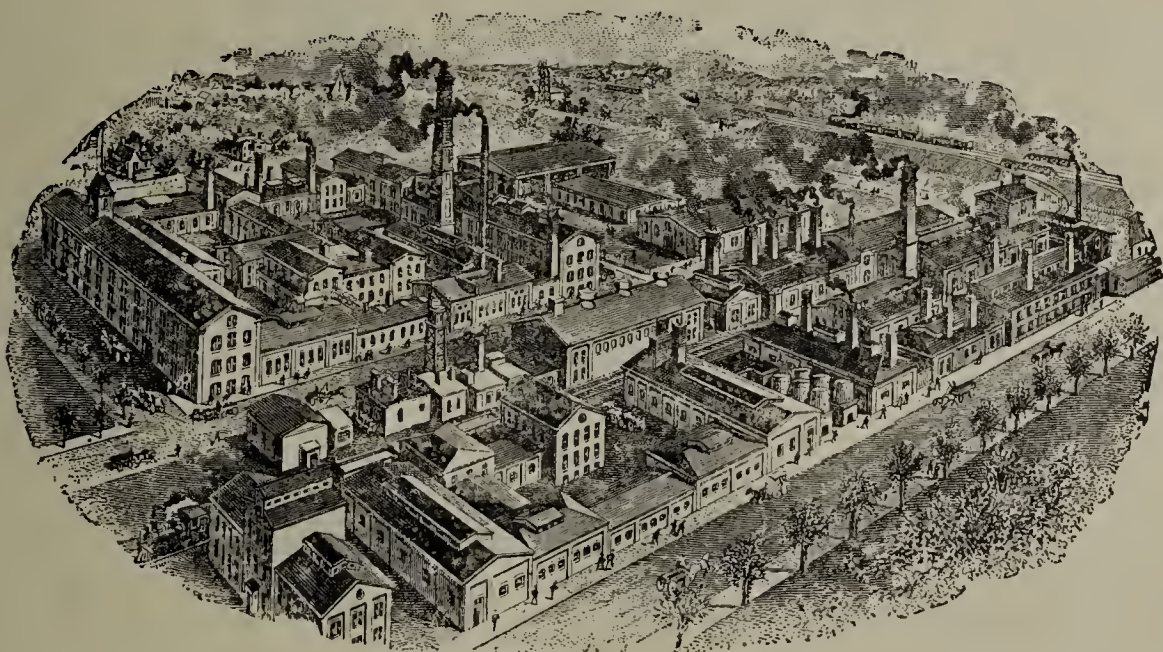
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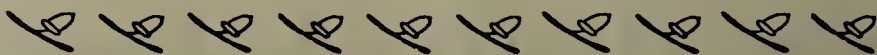
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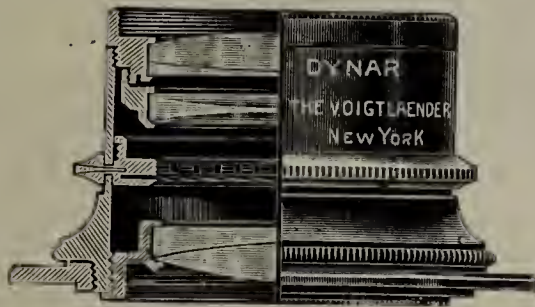
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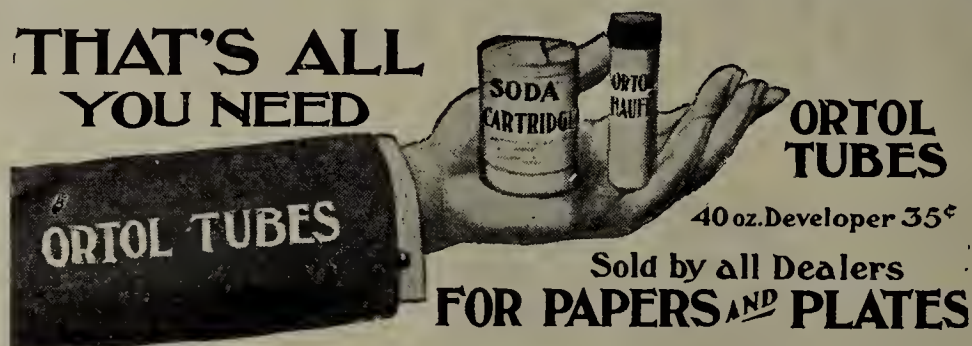
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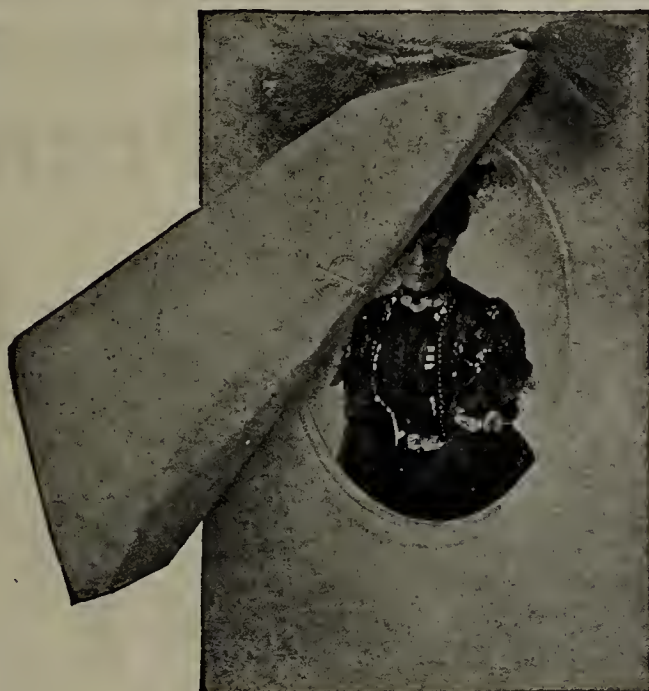
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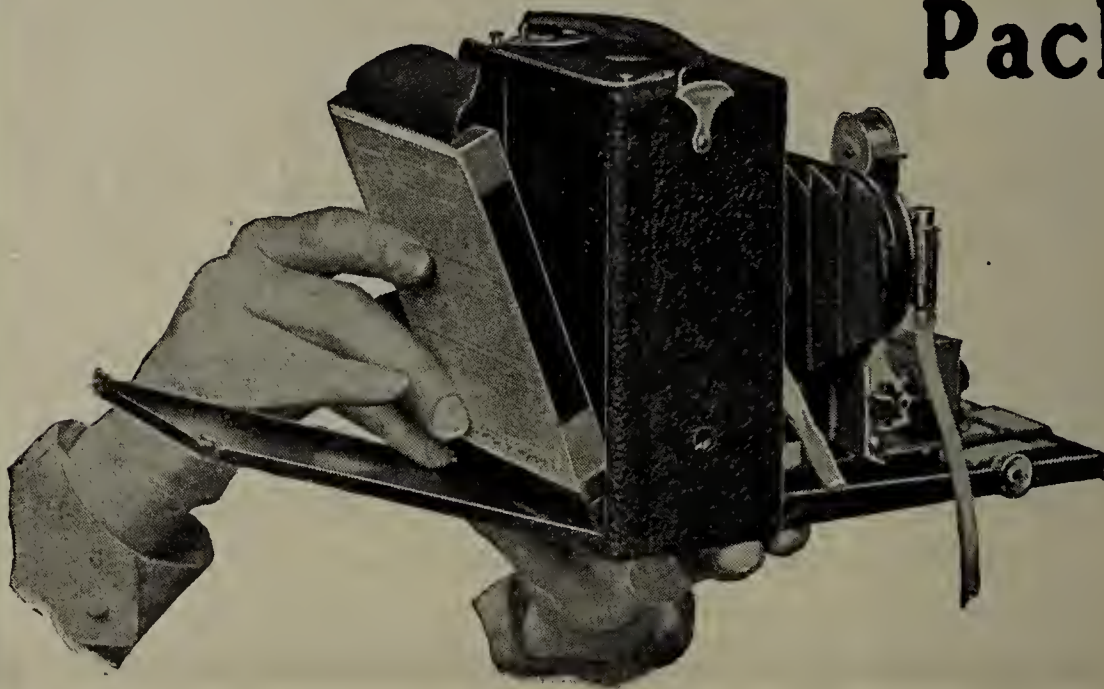
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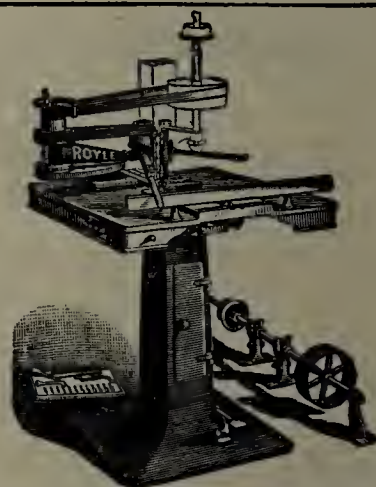
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